

**Army Regulation 95-1**

**Aviation**

# **Flight Regulations**

**Headquarters  
Department of the Army  
Washington, DC  
1 September 1997**

**UNCLASSIFIED**

# ***SUMMARY of CHANGE***

AR 95-1

Flight Regulations

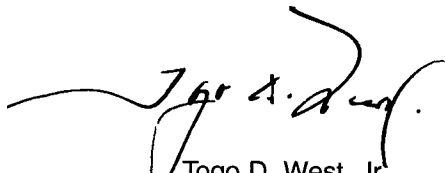
This revision--

- o Merges AR 95-1, Flight Regulations with AR 95-3, Aviation General Provisions, Training, Standardization and Resource Management.
- o Provides guidance on implementing Internal Management Controls per AR 11-2 and applicable aviation Control Review Checklists, Appendix B, were added (para 1-5).
- o Revises use of Army aircraft under Operational Support Airlift (OSA) missions to reflect new management procedures (chap 3).
- o Changes unit waiver authority to commanders of MACOMs, Commander, United States Army Reserve Command (USARC), and Chief, National Guard Bureau. Individual waiver authority was changed from the installation commander to the, "...first commander, O6 or above, in the individual's chain-of-command" (para 4-2).
- o Changes approval authority for authorizing individuals not qualified to fly an aircraft requiring two pilots from the MACOM (four star level) to any MACOM commander. This authority can be further delegated to the two star level (para 4-23c(4) and (5)).
- o Lists mandatory prerequisites for IP candidates (para 4-26b).
- o Adds nonrated crew member, nonrated crew member instructor (FI) and nonrated crewmember standardization instructor (SI) requirements (paras 4-32, 4-33, and 4-34).
- o Updates content to reflect FAR airspace reclassification (table 5-1, paras 5-2c(4), 5-3d, and 5-5a(8)).
- o Updates the required equipment list for mission requirements and adds an NVD column (table 5-2).
- o Revises Chapter 6, Safety of Flight (SOF) message procedures and adds Aviation Safety Action Messages (ASAMs) (chap 6).
- o Adds the Army Flying Hour Program (FHP) that sets forth responsibilities, policies, and procedures for MACOM flying hour managers (chap 10).
- o Revises DA Form 5484-R Mission Schedule/Brief, and adds instructions (app C).

Effective 1 October 1997

Aviation

## Flight Regulations



Togo D. West, Jr.  
Secretary of the Army

**History.** This revision consolidates AR 95-1 and AR 95-3 into one publication. Because this publication has been revised extensively, the changed portions have not been highlighted.

**Summary.** This regulation covers aircraft operations, crew requirements, and flight rules. It also covers Army aviation general

provisions, training, standardization, and management of aviation resources.

**Applicability.** This regulation applies to all Army, Army National Guard of the United States, and U.S. Army Reserve aircraft systems and persons involved in the operation, aviation training, standardization, and maintenance of such aircraft and systems. This includes aircraft on loan, lease, and bailment to the Army, the Army National Guard, and the U.S. Army Reserve. During mobilization, chapters and policies contained in this regulation may be modified by the Proponent.

**Proponent and exception authority.** The proponent of this regulation is the Deputy Chief of Staff for Operations and Plans (DCSOPS). The DCSOPS has the authority to approve exceptions to this regulation which are consistent with controlling law and regulation. The DCSOPS may delegate this authority in writing to a division chief within the proponent agency in the grade of colonel or the civilian equivalent.

**Army management control process.** This regulation is subject to the requirements

of AR 11-2. It contains internal control provisions and checklists for conducting internal control reviews. These checklists are published in Appendix B.

**Supplementation.** Supplementation of this regulation and establishment of command and local forms are prohibited without prior approval of HQDA DCSOPS, ATTN: DAMO-FDV, 400 ARMY PENTAGON, WASH DC, 20310-0400.

**Suggested Improvements.** Users of AR 95-1 are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Commander, U.S. Army Aviation Center, ATTN: ATZQ-ESL, Fort Rucker, AL 36362-5211.

**Distribution.** Distribution of this publication is made in accordance with the requirements on initial distribution number (IDN) 092080, intended for command level A, B, C, D, and E for Active Army, the Army National Guard, and the U.S. Army Reserve.

### Contents (Listed by paragraph and page number)

#### Chapter 1

##### General, page 1

Purpose • 1-1, page 1

References • 1-2, page 1

Explanation of abbreviations and terms • 1-3, page 1

Responsibilities • 1-4, page 1

Internal control review checklist • 1-5, page 1

Deviations • 1-6, page 2

Waivers and delegation of authority • 1-7, page 2

#### Chapter 2

##### Aviation Management, page 2

Personnel authorized to fly Army aircraft • 2-1, page 2

Personnel authorized to start, run up, and taxi Army aircraft • 2-2, page 2

Crewmembers prohibited from performing aircrew duty • 2-3, page 2

Aviators restricted to limited cockpit duty • 2-4, page 2

Aircrew and maintenance checklists • 2-5, page 3

Logging flying time • 2-6, page 3

Computation of flying time • 2-7, page 3

Individual flight records • 2-8, page 3

Use of airports, heliports, and other landing areas • 2-9, page 4

Local flying rules • 2-10, page 4

Special use airspace (SUA) • 2-11, page 4

Aircraft lighting requirements • 2-12, page 4

Flight violations • 2-13, page 4

Briefing officers • 2-14, page 5

Noise abatement • 2-15, page 5

#### Chapter 3

##### Operations and Safety, page 5

###### Section I

Use of Army Aircraft, page 5

General • 3-1, page 5

Required Use • 3-2, page 5

Operational Use • 3-3, page 6

Other Official Use • 3-4, page 6

Operational support airlift missions • 3-5, page 6

OSA management responsibilities • 3-6, page 6

Justification • 3-7, page 7

Procedures • 3-8, page 7

Data collection and use • 3-9, page 7

Special missions • 3-10, page 7

Prohibited missions • 3-11, page 8

Passenger policy • 3-12, page 8

Passenger restrictions • 3-13, page 9

\*This regulation supersedes AR 95-1, 30 May 1990; AR 95-3, 27 September 1990; and DA Memo 95-1 (Flying Hour Program), 4 April 1991.

## Contents—Continued

### Section II

*Safety, page 9*

Safety functions • 3–14, *page 9*

Mishap reports, investigations, and release of information • 3–15, *page 9*

Risk management • 3–16, *page 9*

Crew endurance • 3–17, *page 9*

DA Form 2696-R (Operational Hazard Report) • 3–18, *page 10*

### Section III

*Aircraft Maintenance, page 10*

Maintenance test flights • 3–19, *page 10*

Maintenance operational check • 3–20, *page 10*

### Section IV

*Army Aircraft Performance Records, page 10*

Requests for performance records • 3–21, *page 10*

Purpose of performance records • 3–22, *page 10*

## Chapter 4

**Training, page 10**

### Section I

*Training Program and Literature, page 10*

General • 4–1, *page 11*

Waivers to requirements • 4–2, *page 11*

Publications • 4–3, *page 11*

Aircrew information reading files • 4–4, *page 11*

Aircrew training program • 4–5, *page 11*

Aircraft qualification/refresher training • 4–6, *page 11*

Annual proficiency and readiness test • 4–7, *page 11*

Emergency procedures training • 4–8, *page 11*

Hands-on performance test • 4–9, *page 12*

Failure to meet ATP requirements • 4–10, *page 12*

Synthetic flight training system requirements • 4–11, *page 13*

Civilian flight time for RC aviators • 4–12, *page 13*

Additional flight training periods • 4–13, *page 13*

Aeromedical training • 4–14, *page 13*

Ejection seat training • 4–15, *page 13*

Deck-landing operations training • 4–16, *page 13*

Aircraft survivability equipment/electronic warfare training • 4–17, *page 13*

Currency • 4–18, *page 14*

Similar aircraft • 4–19, *page 14*

### Section II

*Flight Crew Members, page 14*

Flight crews • 4–20, *page 14*

Pilot in command • 4–21, *page 14*

Air mission commander • 4–22, *page 14*

Pilot • 4–23, *page 14*

Copilot • 4–24, *page 14*

Unit trainer • 4–25, *page 14*

Instructor Pilot • 4–26, *page 14*

Instrument examiner • 4–27, *page 15*

Standardization instructor pilot • 4–28, *page 15*

Maintenance test pilot • 4–29, *page 15*

Maintenance test pilot evaluator • 4–30, *page 15*

Experimental test pilot • 4–31, *page 15*

Nonrated crew member • 4–32, *page 15*

Nonrated crew member instructor • 4–33, *page 15*

Nonrated crew member standardization instructor • 4–34, *page 16*

### Section III

*Standardization, page 16*

Aviation standardization program • 4–35, *page 16*

U.S. Army Aviation Commander's Conference • 4–36, *page 16*

MACOM, USARC and numbered Army aviation standardization committees • 4–37, *page 16*

Installation and area aviation standardization committees • 4–38, *page 16*

U.S. Army Aviation Center • 4–39, *page 16*

## Chapter 5

**Flight Procedures and Rules, page 16**

General • 5–1, *page 16*

Preflight • 5–2, *page 17*

Departure procedures • 5–3, *page 18*

En route procedures • 5–4, *page 19*

Arrival procedures • 5–5, *page 19*

## Chapter 6

**Safety of Flight (SOF) messages and Aviation Safety Action Messages (ASAM), page 20**

General • 6–1, *page 20*

### Section I

*Safety of Flight Messages, page 20*

Responsibilities • 6–2, *page 20*

Type of SOF messages • 6–3, *page 21*

Issuance of SOF messages • 6–4, *page 21*

Other notifications • 6–5, *page 21*

Exception to provisions of SOF message • 6–6, *page 22*

Reporting • 6–7, *page 22*

Release of grounded aircraft • 6–8, *page 22*

Information addressees • 6–9, *page 22*

### Section II

*Aviation Safety Action Messages, page 22*

Responsibilities • 6–10, *page 22*

Types of aviation safety action messages • 6–11, *page 23*

Issuance of ASAMs • 6–12, *page 23*

Other notifications • 6–13, *page 23*

Exceptions to provisions of ASAMs • 6–14, *page 23*

Reporting • 6–15, *page 23*

Information addressees • 6–16, *page 23*

## Chapter 7

**Weight and Balance, page 29**

General • 7–1, *page 29*

Weight and balance technicians • 7–2, *page 29*

Aircraft weight and balance classifications • 7–3, *page 29*

Aircraft weight and balance file • 7–4, *page 29*

Removal, addition, or relocation of aircraft equipment • 7–5, *page 30*

Reviewing weight and balance file • 7–6, *page 30*

Aircraft weighing • 7–7, *page 30*

## Chapter 8

**Aviation Life Support, page 30**

### Section I

*Aviation Life Support System, page 30*

General • 8–1, *page 30*

System description • 8–2, *page 31*

### Section II

*Aviation Life Support Equipment, page 31*

Aviation life support equipment • 8–3, *page 31*

Authorization for ALSE • 8–4, *page 31*

Flight data recorders • 8–5, *page 31*

Aircraft safety equipment • 8–6, *page 31*

Oxygen system • 8–7, *page 32*

Parachute requirements • 8–8, *page 32*

Protective clothing and equipment • 8–9, *page 32*

Protective masks • 8–10, *page 32*

## Contents—Continued

Seat belts and restraints • 8–11, *page 32*

Survival equipment • 8–12, *page 32*

### Section III

*Personnel and Training Requirements, page 33*

ALSE maintenance personnel • 8–13, *page 33*

Training of ALSE maintenance personnel • 8–14, *page 33*

Training for aircrews • 8–15, *page 33*

### Section IV

*ALSE Maintenance Requirements, page 33*

Maintenance requirements • 8–16, *page 33*

Inspection, maintenance, and repair • 8–17, *page 33*

Storage and work areas • 8–18, *page 33*

## Chapter 9

**Nonstandard Aircraft, page 33**

### Section I

*Acquisition and Use, page 33*

General • 9–1, *page 33*

Policy • 9–2, *page 33*

Logistical support • 9–3, *page 34*

### Section II

*Training and Standardization, page 34*

Waiver Authority • 9–4, *page 34*

Official Publications • 9–5, *page 34*

Training and Standardization • 9–6, *page 34*

Qualification Training • 9–7, *page 34*

Flight Evaluations • 9–8, *page 34*

Qualification Requirements for IPs • 9–9, *page 35*

## Chapter 10

**The Army Flying Hour Program, page 35**

Objective • 10–1, *page 35*

Responsibilities • 10–2, *page 35*

FHP concept of management • 10–3, *page 35*

FHP management cycle • 10–4, *page 35*

General FHP management policy • 10–5, *page 35*

Procedures for development of the POM FHP • 10–6, *page 36*

Procedures for development of the budget FHPs • 10–7, *page 36*

Procedures for developing the execution year FHP • 10–8, *page 36*

Procedures for submitting the quarterly projections report • 10–9, *page 36*

Procedures for reporting the execution year FHP • 10–10, *page 36*

Procedures for cross-leveling hours • 10–11, *page 37*

Procedures for use of the MACOM flying hour program diskettes • 10–12, *page 37*

## Appendixes

**A.** References, *page 40*

**B.** Internal Control Review Checklist, *page 42*

**C.** Instructions for Completing Mission Schedule/Brief (DA Form 5484-R), *page 42*

## Table List

Table 3–1: Crew endurance guide, *page 10*

Table 4–1: Synthetic flight training system, *page 13*

Table 5–1: Army VFR weather minimums, *page 18*

Table 5–2: Required equipment, *page 19*

Table 5–3: Aircraft equipment requirements for Category II Approaches, *page 20*

Table 10–1: FHP management reports, *page 38*

Table 10–2: LCCS Contract OSA aircraft annual flying hour program, *page 38*

## Figure List

Figure 6–1: Safety of flight message content, *page 26*

Figure 6–2: SOF and ASAM compliance reporting example, *page 26*

Figure 6–3: Aviation safety action message, *page 29*

Figure 10–1: Standard format for flying hour requirements (RCS CSGPO-464), *page 38*

Figure 10–2: Format for quarterly projections report (RCS GPSGP-463), *page 39*

Figure 10–3: Format for quarterly execution report (RCS CSGPO-465), *page 39*

## Glossary

## Index

**RESERVED**

## Chapter 1 General

### 1-1. Purpose

This regulation establishes procedures, policy, and responsibilities for—

- a. Crew member training and standardization.
- b. Aircrew Training Program (ATP).
- c. Flight violations.
- d. Command, control, operation, and use of Department of the Army (DA) aircraft.
- e. DA Aviation Standardization Program.
- f. Safety of flight (SOF) messages and Aviation Safety Action Messages (ASAM).
- g. Aircraft weight and balance.
- h. Aviation life support equipment (ALSE).
- i. Nonstandard aircraft.
- j. DA flying hour program (FHP).

### 1-2. References

Required and related publications and prescribed and referenced forms are listed in appendix A.

### 1-3. Explanation of abbreviations and terms

Abbreviations and special terms used in this regulation are explained in the glossary.

### 1-4. Responsibilities

- a. The Secretary of the Army, or authorized representative (unless otherwise stated in this regulation), reserves all authority and final approval for DA aviation, and has responsibility for operational support airlift (OSA) management.
- b. The Office of the Assistant Secretary of Defense (Public Affairs) (OASD(PA)). The OASD(PA) will approve requests to engage in public demonstrations.
- c. The Assistant Secretary of the Army (Financial Management) (ASA(FM)). The ASA(FM) will prepare and publish Army Cost Comparison Rates and Army Aircraft Reimbursement Rates annually and provide cost analysis support to OSA management and other agencies on request.
- d. The Chief of Staff, Army. The Office of the Chief of Staff, Army will approve Army-wide grounding of an entire mission, type, design, and series (MTDS) fleet of aircraft. This authority applies to Safety Of Flight (SOF) and Aviation Safety Action Messages (ASAMs) discussed in chapter 6.
- e. The Administrative Assistant, on behalf of the Secretary of the Army, will provide policy guidance on the use of Operation Support Airlift (OSA) aircraft.
- f. The Director of Management, on behalf of the Director of the Army Staff, with the concurrence of the Administrative Assistant, on behalf of the Secretary of the Army, will provide management oversight and policy guidance for the use and scheduling of Army executive jets.
- g. The Deputy Chief of Staff for Operations and Plans (DCSOPS). The DCSOPS will have staff responsibility for Army aviation, to include—
  - (1) Selected waiver authority limited to those items referenced in paragraph 1-7.
  - (2) Establishing objective wartime requirements for OSA. (All OSA procedures are covered in chap 3.)
  - (3) Annually reviewing the continuing need for OSA aircraft inventory.
  - (4) Determining future OSA aircraft stationing and changes to the aviation structure for OSA.
  - (5) Reporting Army OSA flying hour program execution during the quarterly Program Performance and Budget Execution Review.
  - (6) The overseeing centralized scheduling for Army OSA, with the exception of executive jet scheduling.
- h. The Deputy Chief of Staff for Logistics (DCSLOG). The DCSLOG will have staff responsibility for—

- (1) Approval of SOF and ASAM messages (chap 6).
- (2) Aircraft weight and balance (chap 7).
- (3) Aviation life support (chap 8).
- (4) Non-standard aircraft (chap 9).
- i. The Commander, U.S. Army Aviation Center (USAAVNC). The Commander, USAAVNC will serve as—
  - (1) The DA preparing agency for selected AR 95 series Army regulations.
  - (2) The DA preparing agency for aviation training and standardization literature.
  - (3) The proponent agency for the U.S. Army Aviation Standardization Program (See para 4-39).
- j. The Commander, Aviation and Missile Command (AMCOM). The Commander, AMCOM will—
  - (1) Report SOF/ASAM conditions and for issuance of SOF and ASAM messages (chap 6).
  - (2) Be the technical proponent for all U.S. Army aviation weight and balance (chap 7).
- k. The Surgeon General (TSG). TSG will coordinate health hazard assessment and other medical and non medical aspects relating to the Aviation Life Support System (ALSS)(chap 8).
- l. The Chief, National Guard Bureau (CNGB). The CNGB will—
  - (1) Support missions and establish procedures for the OSA.
  - (2) Retransmit SOF and ASAM messages (chap 6).
- m. The Commanding General, U.S. Army Materiel Command (CG, AMC). The CG, AMC will—
  - (1) Be responsible for the direction of overall command activities involving aviation weight and balance (para 7-1a).
  - (2) Serve as the DA point of contact for all aviation life support equipment management (para 8-1a).
- n. The Commanding General, U.S. Army Training and Doctrine Command. The CG, TRADOC, in coordination with other Headquarters, Department of the Army (HQDA) agencies will—
  - (1) Develop and recommend the doctrine, concepts, material requirements, and organization of Army aviation elements.
  - (2) Develop training, standardization, and evaluation literature for aircrew training programs (chap 4).
  - (3) Oversee the overall training of aviation weight and balance (para 7-1b).
  - (4) Oversee the doctrine, training, and material needs for the aviation life support system (ALSS) (para 8-1b).
- o. The Commander, Operational Support Airlift Command (OSAC). The Commander, OSAC will schedule Army requirements for OSA support (chap 3).
- p. The Commanders of Major Army commands (MACOMs). The Commanders of MACOMs will—
  - (1) Maintain individual flight records (chap 2).
  - (2) Oversee OSA (chap 3).
  - (3) Monitor the Army aviation standardization program (chap 4).
  - (4) Oversee safety of flight messages (chap 6).
  - (5) Implement ALSS policies and procedures (chap 8).
- q. The Commander, U.S. Army Reserve Personnel Center (ARPERCEN). The Commander, ARPERCEN will maintain individual flight records of all individual ready reserve (IRR) and individual mobilization asset (IMA) aviators and flight surgeons (chap 2).

### 1-5. Internal control review checklist

- a. The regulation that prescribes policy, standards, responsibilities, and accountability for establishing and maintaining effective Internal Management Controls is AR 11-2. It also provides guidelines for the execution of the Army Internal Management Control Program.
- b. Located in Appendix B are the applicable Internal Control Review Checklists. Managers should use the checklists as daily guidance, and will formally complete the checklists as scheduled by the HQDA functional proponents in the annually updated Management Control Plan. The checklists will be used following the guidance in AR 11-2. Specifically, they will—
  - (1) Test whether prescribed controls are in place, operational, and effective. Analytical techniques, such as statistical sampling, should be used when appropriate to conserve resources.

(2) Identify areas where additions or reductions to existing controls are needed.

(3) Select corrective actions when deficiencies have been found that can be corrected locally.

(4) Refer deficiencies that cannot be corrected locally to higher command levels for assistance in correcting.

(5) Provide support for the commander's annual statement on how adequate internal controls are within the organization.

#### **1-6. Deviations**

a. Individuals may deviate from provisions of this regulation during emergencies.

b. Individuals who deviate from the provisions of this regulation, Federal Aviation Administration (FAA), or host country regulations must report details of the incident directly to their unit commander. The incident must be reported within 24 hours after it occurs.

c. Violations of Federal Aviation Regulations (FAR), International Civil Aviation Organization (ICAO), host country, and military aviation regulations will be treated per paragraph 2-13.

#### **1-7. Waivers and delegation of authority**

a. Authority to grant waivers is stated in specific paragraphs of this regulation. Authority granted to MACOMs per this regulation may be further delegated by the MACOM Commander, except when expressly prohibited. All other Commanders may not further delegate waiver authority unless authorized in the specific paragraph.

b. When waiver authority is not specified in specific paragraphs, waivers to provisions in chapters 2, 3, and 5 may only be granted by HQDA DCSOPS, ATTN: DAMO-FDV, 400 ARMY PENTAGON, WASH, DC 20310-0400; chapter 4, section II of chapter 9 and chapter 10 only by HQDA DCSOPS, ATTN: DAMO-TRO, 400 ARMY PENTAGON, WASH, DC 20310-0400; and, chapters 6,7,8 and section I of chapter 9 only by HQDA DCSLOG, ATTN: DALO-AV, 500 ARMY PENTAGON, WASH, DC 20310-0500.

### **Chapter 2 Aviation Management**

#### **2-1. Personnel authorized to fly Army aircraft**

a. The following personnel may fly Army aircraft:

(1) Army aviators who—

(a) Are members of the active and reserve components (RC).

(b) Are in aviation service (pilot status code 1) and have complied with qualification, training, evaluation, and currency requirements of this regulation (chap 4), for the aircraft to be flown.

(2) Civilian employees of government agencies and government contractors who have satisfied all of the following—

(a) Appropriate certifications or ratings;

(b) Written authorization from the appropriate MACOM commander; the Commanding General, USAAVNC for units assigned to USAAVNC, or Chief, NGB for National Guard (NG) units; and

(c) Complied with qualification training, evaluation, and currency requirements of this regulation, (chap 4), and the provisions of AR 95-20 (contractor personnel), the contract and/or statement of work for the aircraft to be flown.

(3) Aviators in other U.S. Services who—

(a) Are in aviation service;

(b) Have complied with qualification, training, evaluation, and currency requirements of their service or of this regulation (chap 4), for the aircraft to be flown; and

(c) Have written authorization from their service and the MACOM commander.

(4) Aviators of foreign services who—

(a) Have completed the course of instruction prescribed by their service and have been awarded an aeronautical designation of aviator;

(b) Complied with qualification training, evaluation, and currency

requirements of their service or of this regulation (chap 4), for the aircraft to be flown; and

(c) Have written authorization, including a disclaimer absolving the US Government from liability (unless a disclaimer is included under the provisions of an approved exchange program) from their government. The appropriate host MACOM must provide written authorization that will include, as a minimum, the purpose and duration of the authorization. If authorized to fly, they will be restricted from performing pilot-in-command duties unless serving in approved exchange officer positions established specifically for flying purposes.

(5) Personnel listed in (1) through (4) above who are not qualified or current to operate the aircraft to be flown when receiving training or performing limited cockpit duties per paragraph 2-4 must be directly supervised by an instructor pilot (IP) or a standardization instructor pilot (SP) who is qualified and current in the aircraft being flown.

(6) Individuals receiving aviator instruction authorized by Headquarters, Department of the Army (HQDA) or HQDA Directorate of Evaluation and Standardization (DES) designated agencies. These people may operate Army aircraft when training under an approved program of instruction (POI) or aircrew training program (ATP).

(7) Flight surgeons or aeromedical physicians' assistants in aviation service when in an aircraft not requiring more than one pilot as a minimum crew. In addition an IP must be at one set of flight controls.

(8) Graduates of the USAAVNC aeroscout observer course and field artillery aerial observer (FAAO) course are authorized to fly scout helicopters when undergoing training and conducting missions per the aircrew training manual (ATM). Training must be conducted by a designated IP, SP, UT, or designated PC (abbreviations are spelled out in para 2-6a(1)) who is qualified and current in the helicopter being flown and is at one set of flight controls.

b. All Army aviators who are in aviation service per AR 600-105 must meet the annual physical requirements of AR 40-501 regardless of assignment.

c. Procedures for award of aeronautical designations are stated in AR 600-105 and AR 600-106.

#### **2-2. Personnel authorized to start, run up, and taxi Army aircraft**

a. The following personnel are authorized to start, run up, and taxi aircraft.

(1) Personnel listed in paragraph 2-1a(1), (2), (3), and (4).

(2) Other personnel who meet the requirements of paragraph 3-20.

b. Personnel listed in a(2) above are prohibited from starting, running-up, or taxiing helicopters.

c. Contractor personnel operating per AR 95-20, are authorized to start and run up aircraft under the provisions of the contract using procedures in accordance with the operator's manual.

#### **2-3. Crewmembers prohibited from performing aircrew duty**

The following crew members are prohibited from performing aircrew duties:

a. Commissioned officers in non-operational aviation positions, except per paragraph 2-4 of this regulation and AR 570-4, paragraph 5-14.

b. All crew members while attending nonflying courses of instruction of more than 90 days.

c. Those disqualified, temporarily suspended, or whose aviation service is administratively terminated (AR 600-105 or AR 600-106).

d. Crew members in an authorized leave status.

#### **2-4. Aviators restricted to limited cockpit duty**

a. Aviators ranked Colonel (O6) in nonoperational aviation positions and general officers who hold a U.S. military aeronautical designation may perform cockpit duties on a limited basis provided requirements specified in AR 570-4, paragraph 5-14 are met. Officers performing such duties will—

- (1) Maintain a current flight physical per AR 40-501.
- (2) Fly with an IP qualified and current in that aircraft at one set of flight controls.
  - b. Other ATP, synthetic flight training system (SFTS), and Annual Proficiency and Readiness Test (APART) requirements do not apply to officers performing duties per this paragraph.
  - c. Officers performing limited cockpit duty do not meet the requirements for a copilot as specified in paragraph 4-24b unless they have undergone an instrument flight evaluation per paragraph 4-9b in the aircraft category being flown within the 12 month period prior to the flight or are undergoing instrument training.

## 2-5. Aircrew and maintenance checklists

- a. The publications and forms required by DA Pam 738-751 will be in each aircraft.
- b. Operator and crew member checklists will be used for before starting engines through before leaving aircraft checks. While airborne, when time does not permit use of the checklist or when its use would cause a safety hazard, required checks may be accomplished from memory.
- c. Checklists will be used while making maintenance operational checks, maintenance test flights, and preventive maintenance inspections.
- d. Only DA approved operator's manuals and checklists will be used, except as specified in paragraph 9-5.

## 2-6. Logging flying time

An entry will be made on DA Form 2408-12 (Army Aviator's Flight Record) for each flight in aircraft and flight simulators by all crew members indicating duties performed, mission, and flight condition.

a. *Duty.* Use the following symbols to record flight time when performing duties specified by the symbol. Only one aviator occupying a flight crew station may use any one of these symbols for any time period. Crew members instructing or evaluating from a nonflight crew station will use the symbol for the duty being performed.

- (1) Rated Crew members.
  - (a) PC—pilot in command. This symbol will not be used by a designated pilot in command who is performing assigned duties as IP, SP, UT, IE, ME, MP, or XP. In these cases, the specific symbol will be used to indicate the duty being performed by the pilot in command.
  - (b) PI—pilot.
  - (c) CP—copilot. This symbol is used only by an aviator who is at a flightcrew station but is not qualified or current in the aircraft being flown, or performing copilot duties at other than a flightcrew station and is undergoing training or evaluations conducted by an IP, SP, IE, UT, or ME. For example: nap-of-the-earth (NOE) navigation, instrument navigation, and so forth.
  - (d) SP—standardization instructor pilot.
  - (e) IP—instructor pilot.
  - (f) IE—instrument examiner.
  - (g) UT—unit trainer.
  - (h) ME—maintenance test pilot evaluator.
  - (i) MP—maintenance test pilot. This symbol may be used by both aviators on functional test flights in two pilot aircraft when authorized by the commander.
  - (j) XP—experimental test pilot. This symbol may be used by both aviators on experimental or engineering flight tests when authorized by the commander.
- (2) Nonrated Crew members.
  - (a) AO— aerscout/aerial observer.
  - (b) CE— crewchief, aircraft mechanic, and non-crew members designated by the commander and included in the unit's ATP.
  - (c) FE— flight engineer.
  - (d) FI—nonrated crew member instructor.
  - (e) SI—nonrated crew member standardization instructor.
  - (f) MO—flight surgeon or other medical personnel.

(g) OR—aircraft maintenance personnel, technical observer, fire fighter, aerial photographer, gunner, or duties requiring flight.

### b. Mission.

- (1) A—acceptance test flight.
- (2) C—combat mission directly against the enemy within a designated combat zone.
- (3) F—maintenance test flight.
- (4) S—service missions, other than A, C, F, T, or X.
- (5) T—training flight for individual qualification, refresher, mission, or continuation.
- (6) X—experimental test flight.
- (7) D—imminent danger. Applies when Imminent Danger Special Pay is authorized per Department of Defense (DOD) Pay Manual, chapter 10.
- c. *Flight condition.* Each crew member will use only one of the following symbols to identify the condition or mode of flight for any time period.
  - (1) AA—*air to air*.
  - (2) D—*day*. Between the hours of official sunrise and sunset.
  - (3) DS—*day vision system*. Night vision system installed on aircraft used during the day; also logged when two or more devices are used.
  - (4) H—*hood/simulated IMC*. Vision of the person flying the aircraft is artificially limited from viewing the horizon or earth surface. Aircraft attitude must be controlled using aircraft instruments. An observer is required for all hooded flights.
  - (5) N—*night*. Between the hours of official sunset and sunrise.
  - (6) NG—*night goggles*. Night vision goggles used during night.
  - (7) NS—*night systems*. Night vision system installed on aircraft used during night; also logged when two or more devices are used simultaneously.
  - (8) W—*weather*. Actual weather conditions that do not permit visual contact with the horizon or earth surface. Aircraft attitude must be controlled using aircraft instruments.

## 2-7. Computation of flying time

Flying time starts when an airplane begins to move forward on the takeoff roll or when a helicopter lifts off the ground. Flying time ends when the aircraft has landed and the engines are stopped or the flying crew changes.

## 2-8. Individual flight records

- a. Each crew member must present his or her individual flight records to the unit to which assigned within 14 calendar days after reporting for duty.
- b. The flying experience and qualification data for each rated crew member and flight surgeon in aviation service and each non-rated crew member (AR 600-105 and AR 600-106) will be documented in the DA Form 3513 (United States Army Individual Flight Records Folder (IFRF)). DA Form 759 (Individual Flight Record and Flight Certificate—Army); DA Form 759-1 (Individual Flight Record and Flight Certificate—Army, Aircraft Closeout Summary); DA Form 759-2 (Individual Flight Record and Flight Certificate—Army, Flying Hour Work Sheet); and DA Form 759-3 (Individual Flight Record and Flight Certificate—Army, Flight Record and Flight Pay Work Sheet) are used to develop data for the permanent record. These forms are filed in the IFRF and become DA's permanent statistical, historical, and personnel flight records. DA Form 759-3 becomes a part of the aerscout observer's permanent flight records. Records are kept and distributed in accordance with FM 1-300.
- c. Flight records will be prepared and kept on file for—
  - (1) Aviators in operational aviation positions.
  - (2) Aviators in nonoperational aviation positions and those restricted or prohibited by statute from flying Army aircraft. These records will be kept in an inactive file either with operational aviator files or with military personnel records as specified by MACOM commanders.
  - (3) Other personnel authorized to take part in flights.
  - (4) Persons attending initial entry flight training.

d. Commanders will keep and distribute required individual flight records for persons assigned or attached to their organization.

e. The Commander, U.S. Army Reserve Personnel Center (ARPERCEN), will store the individual flight records of all aviators, non-rated crew members who have flight records and flight surgeons after retirement, discharge, resignation, assignment to U.S. Army Reserve (USAR) control group, or death.

f. Closing flight records for—

(1) Active duty and USAR aviators, flight surgeons in aviation service, field artillery observers, aerial observers and other non-rated crew members who have a flight record requirement will be closed out at the end of the birth month and when change occurs in duty or aviation service. Other active duty personnel (excluding nonoperational aviators) flight records will be closed out at the end of the fiscal year or birth month whichever comes first and when change occurs in duty or aviation service.

(2) National Guard aviators, flight surgeons, field artillery aerial observers, aeroscout observers and other crew members' records will be closed out at the end of the calendar quarter designated by the commander and when change occurs in duty or aviation service.

## **2-9. Use of airports, heliports, and other landing areas**

a. Aviators may operate Army aircraft at airports and heliports classified as military, Federal Government or public use in DOD or National Oceanographic Survey (NOS) flight information publications (FLIP). Private, closed or otherwise restricted airports and heliports will be used only with prior permission of appropriate authorities and if the facility is suitable for operations.

b. Commanders may authorize the use of temporary landing areas (other than airports or heliports) off military reservations and Government leased training areas. They must obtain approval of the landowner or the approving authority and comply with the landing area requirements of the state or host country. Commanders will consult with the appropriate Department of the Army Regional Representative (DARR) or host nation aviation agency (AR 95-2, table 6-1).

c. The installation or field training exercise commander will set policies on the use of aircraft landing sites on military reservations and field training areas.

d. Aviators may select landing and takeoff areas when on lifesaving missions or when further flight is inadvisable.

e. Aviators should be aware that they may be charged for the use of private facilities on public airports. The pilot in command should report unexpected airport fees using a DA Form 3588 (COMM Card).

## **2-10. Local flying rules**

a. Installation commanders having Army aircraft assigned, attached, or tenant to his or her command will prepare and publish local flying rules. Rules will include the use of tactical training and maintenance test flight areas, arrival and departure routes, and airspace restrictions as appropriate to help control air operations.

b. Traffic pattern altitudes at Army airfields for airplanes should be set at 1,500 feet above ground level. Helicopter traffic pattern altitudes should be at least 700 feet above ground level.

c. Installation commanders may set different altitudes based on noise abatement, fly-neighborly policies, or other safety considerations. These will be displayed in flight operations and provided to the U.S. Army Aeronautical Services Agency (USAASA) for publication in the flight information publications (FLIP).

## **2-11. Special use airspace (SUA)**

a. AR 95-2 sets Army policy and procedures for handling SUA matters.

b. Operations in SUA will be conducted per instructions in FARs and FLIPs.

c. In combat zones, airspace use, control, and management will be conducted per FM 1-103.

d. Air traffic control services will be provided per FM 1-120.

## **2-12. Aircraft lighting requirements**

a. Army aircraft shall be illuminated to at least the minimum standards required by the country in which the flight operation occurs.

b. Anticollision lights will be on when aircraft engines are operating except when:

(1) Conducting night vision device operations.

(2) Conditions may cause vertigo.

(3) There may be other hazards to safety.

c. Position lights will be on bright between official sunset and sunrise.

d. Night vision device lighting requirements will be as prescribed in unit standing operating procedures, and training mission orders, in accordance with TC 1-210, and AR 95-2, paragraph 9-2.

e. Commanders may authorize exemptions to lighting requirements for night vision device training flights in the NAS when operating per FAA grant of exemption. Overseas MACOM commanders may authorize exemptions after coordinating with the host nation authorities. Exemption must be clearly defined and authorized by the unit commander in standard operating procedures or training mission orders. (AR 95-2.)

## **2-13. Flight violations**

Policies and procedures for reporting and investigating alleged flight rules violations are—

a. Violations. Any violation of FAA, International Civil Aviation Organization (ICAO), host country, and/or any other pertinent aviation regulation will be reported. Any person witnessing or involved in a flight violation involving civil or military aircraft will report it as soon as possible.

(1) Violations by military aircraft should be reported to one of the following:

(a) The commander of the unit, activity, or installation if known, to which the aircraft belongs.

(b) The DARR of the FAA region in which the alleged violation took place. (See AR 95-2 for addresses.)

(c) The Director, U.S. Army Aeronautical Services Office (USAASA), Fort Belvoir, Virginia 22060-5582.

(d) The U.S. Army Aeronautical Detachment, Europe, if the incident took place in its area of responsibility. (See AR 95-2 for address.)

(2) Violations by civil aircraft should be reported to one of the following:

(a) The Flight Standards District Office for the FAA region in which the alleged violation took place.

(b) The FAA Communications Control Center, Washington, DC 20591.

(c) The DARR of the FAA region in which the alleged violation took place. (See AR 95-2 for addresses.)

(d) The Director, USAASA, Fort Belvoir, Virginia 22060-5582.

(e) The U.S. Army Aeronautical Detachment, Europe, if the incident took place in its area of responsibility. (See AR 95-2 for address.)

b. Information reported. To report an alleged violation use a letter or memorandum format. DA Form 2696-R (Operational Hazard Report) is not normally used to report flight violations. When reporting an alleged violation as much information as possible should be given. This should include—

(1) Type and make of aircraft.

(2) Tail number.

(3) Name of pilot in command (see para 2-13d).

(4) Unit assigned, if military.

(5) Location where aircraft is based.

(6) Description of alleged violation, to include—

(a) Specific reference to regulations violated.

(b) What happened.

(c) Time and date the alleged violation occurred.

(d) Where the alleged violation occurred.

(7) Name and phone number of the individual reporting the alleged violation.

(8) Names, addresses, and phone numbers of additional witnesses, if any.

(9) Other pertinent information.

c. Investigation.

(1) Reports of alleged violations received from the FAA, ICAO, or a host country will be investigated under the provisions of AR 15-6.

(2) Commanders receiving a report of violations from sources other than those listed in paragraph 2-13c(1) will first determine if it involves personnel or aircraft under their command and initiate an investigation under AR 15-6, if necessary.

(3) If warranted by available evidence, commanders may convene a flight evaluation board (AR 600-105, chap 4) instead of conducting a separate investigation.

(4) Based on the outcome of the investigation, commanders may take appropriate administrative, judicial, or non judicial action.

(5) Results of investigations conducted per AR 15-6 or AR 600-105, chapter 4, will be reported through channels to the Director, USAASA, Fort Belvoir, VA 22060-5582. The report will include the findings of the investigation, the corrective action taken or proposed, any conclusions derived, the nature of disciplinary action taken (if any), and any other pertinent information. This report must reach USAASA within 60 days of the commander receiving notification of the alleged violation unless—

(a) The immediate commander cannot complete the investigation or the administrative or disciplinary action within this time. In this case, an interim report will be forwarded detailing the reasons for the delay.

(b) A flight evaluation board is convened. USAASA should be notified when the board is convened and the expected completion date.

(6) Under no circumstance will a report of investigation prepared under the provisions of this regulation be released outside of the DOD except in accord with the Freedom of Information Act (FOIA) and the Privacy Act, as implemented by AR 25-55 and AR 340-21. All requests for information under the FOIA or Privacy Act will be referred to the installation or unit FOIA/Operations Security coordinator for processing according to AR 25-55 or AR 340-21.

d. Restricted information. Names of crew members of military aircraft involved in actual or alleged violations will be treated as restricted information and not be released to the public or any agency outside the DOD except by proper authority. Any person receiving requests for names of crew members of Army aircraft should direct such inquiries to the Director, USAASA (see para 2-13a(1)(c)).

## **2-14. Briefing officers**

a. Briefing officers for mission briefings will normally be qualified members of the chain-of-command (not lower than platoon leader) or operations officers. Commanders in the grade of lieutenant colonel and above may designate in writing other briefing officers when the unit chain of command no longer exists or when designated briefing officers cannot brief because of official duties or absences. Briefing officers will be selected based on experience and level of responsibility in the unit. Self briefing is not authorized unless approved by the first officer in the grade of lieutenant colonel or above in the chain of command. Briefing officers will be limited to the number needed to meet operational requirements.

b. Briefing officers are responsible for ensuring that key mission elements are evaluated and briefed to the mission PC. Mission briefing officers will, as a minimum, ensure the following key areas are evaluated in the mission planning sequence:

(1) The flight is in support of an operational unit mission or has been authorized by the unit commander.

(2) Assigned flight crews have been allocated adequate pre-mission planning time.

(3) Assigned flight crews are qualified and current for the mission according to this regulation and the commander's flight crew qualification and selection program per paragraph 4-20.

(4) Forecast weather conditions for the mission meet the requirements of this regulation and local directives.

(5) Flight crews meet unit crew endurance requirements.

(6) Procedures in the commander's risk management program have been completed for the mission and risks are reduced to the lowest level possible.

(7) Required special mission equipment is maintained per published guidance.

c. Briefing officers will utilize DA Form 5484-R (Mission Schedule/Brief). DA Form 5484-R is located at the back of this regulation for reproduction purposes (Instructions for completing DA Form 5484-R is located at Appendix C.). Additionally, DA Form 5484-R may be electronically generated. The electronically generated form must contain all data elements and follow the exact format of the existing printed form. The form number of the electronically generated form will be shown as DA Form 5484-R-E and the data will be the same as the date of the current edition of the printed form. Copies of the DA Form 548-R will be retained in unit files for at least 30 days.

## **2-15. Noise abatement**

a. Noise-abatement policies will be disseminated by the Director, USAASA.

b. Aviators will participate in noise-abatement and fly neighborly programs to minimize annoyance to persons on the ground when missions and safety are not adversely affected.

c. Noise Sensitive Areas. Unless required by the mission, all Army aircraft should maintain a minimum of 2000 feet above the surface of the following: National Parks, Monuments, Recreation Areas and Scenic Riverways administered by the National Parks Service, National Wildlife Refuges, Big Game Refuges or Wildlife Ranges administered by the U.S. Fish and Wildlife Service, and Wilderness and Primitive areas administered by the U.S. Forest Service.

# **Chapter 3 Operations and Safety**

## **Section I Use of Army Aircraft**

### **3-1. General**

Army aircraft will be used for authorized purposes only. Army owned, operated, or controlled aircraft will only be used to transport Army personnel, Government property and other official Government passengers, or other passengers and cargo as authorized by statute and DoD or Army directives, regulations, or policies. Specifically, use of Army aircraft must comply with paragraphs 3-2, 3-3, or 3-4 of this chapter and must not otherwise be prohibited by paragraph 3-11. In addition, air travel must be the most economical mode of transportation consistent with the accomplishment of the military mission, and the particular aircraft to be utilized must be the least costly one available that is capable of satisfying the transportation requirement. Travel by military aircraft that is mission essential, regardless of cost or availability of commercial service, will require complete documentation signed by the senior passenger. This authority cannot be delegated. The classes of missions Army aircraft may be authorized to perform are:

a. Required use

b. Operational use

c. Other official use

### **3-2. Required Use**

Required use includes those missions with a designated Required Use Traveler where the use of military aircraft is required due to continuous requirement for secure communications, security, or for responsive transportation to satisfy exceptional scheduling requirements. Within the Department of the Army, the Secretary of the Army and the Chief of Staff are the only designated required use

positions that require the use of military aircraft for all travel when in a duty status.

### 3-3. Operational Use

Operational use includes those missions required to accomplish the Army's mission and to maintain the combat readiness of aviation and ground units. Operational use missions include, but are not limited to:

- a. Actual or simulated tactical and combat operations
- b. Aircrew training
- c. Intelligence
- d. Counter-narcotics activities
- e. Search and rescue
- f. Transportation of prisoners
- g. Use of defense attaché controlled aircraft
- h. Research and development
- i. Maintenance flights
- j. Flight tests
- k. Repositioning or reassignment of aircraft
- l. Transport of troops/equipment
- m. Special use (Humanitarian, Disaster Relief, and Deployments)
- n. Evacuation (including medical evacuation)
- o. Aeronautical research and space and science applications
- p. Exercising command/supervision authority at adjacent/local installations.
- q. Other such activities required to accomplish the Army's mission.

### 3-4. Other Official Use

Other official use may include travel to give speeches, to attend conferences or meetings and to make routine site visits to facilities. Normally this requirement for travel is accomplished using commercial transportation, but may be performed by Mil Air on Operational Support Airlift subject to conditions on use of OSA..

### 3-5. Operational support airlift missions

Operational support airlift (OSA) missions are movement of high-priority passengers and cargo with time, place, or mission-sensitive requirements. DoD Directive 4500.43, "Operational Support Airlift (OSA)" provides OSA policy guidance, definitions, procedures, and responsibilities. DoD Regulation 4515.13-R, "Air Transportation Eligibility" provides transportation eligibility policy and procedures for military aircraft.

### 3-6. OSA management responsibilities.

- a. The Secretary of the Army is responsible for—
  - (1) Establishing clear accountability for aircraft management at a senior management level.
  - (2) Developing and implementing policies that specify validating requirements and procedures for scheduling assets in support of Army OSA requirements.
- b. The Director of Management, on behalf of the Director of the Army Staff, with the concurrence of the Administrative Assistant, on behalf of the Secretary of the Army, will provide management oversight and policy guidance for the use and scheduling of Army executive jets.
- c. The Assistant Secretary of the Army (ASA) Financial Management (FM), in coordination with Deputy Chief of Staff, Logistics (DCSLOG), will prepare and publish an annual cost per flying hour message that includes DoD and non-DoD costs per flying hour rates by aircraft mission, type, design, and series for all Army aircraft. The ASA(FM) will also publish annually the gross hourly salary for military and civilians to be used for cost effectiveness analysis.
- d. The Deputy Chief of Staff, Operations and Plans, has management responsibility for the following areas:
  - (1) Establish objective wartime requirements for Army OSA aircraft.
  - (2) Annually, review the continuing need for aircraft appropriated based solely on wartime readiness requirements and for reasons other than wartime requirements as well as the cost-effectiveness of

aircraft operations. When not fully justified, the Army will release aircraft determined to be excess.

(3) Review, analyze, and evaluate Army OSA/non-OSA utilization data to determine future aircraft stationing and changes to the aviation structure.

(4) Report Army OSA flying hour program execution during the quarterly Program Performance/Budget Execution Review.

e. Unified, specified, and MACOM commander will—

(1) Ensure that procedures are developed within each subordinate unit to allow for the Operational Support Airlift Command (OSACOM) to capture all OSA travel requirements.

(2) Designate helicopter scheduling authorities for the purpose of scheduling Army helicopter assets to support OSA mission requirements.

(3) Establish internal control procedures to ensure subordinate units comply with OSA program requirements.

f. Operational relationships are established in consonance with the Administrative Assistant to the Secretary, DAS, and DCSOPS.

g. The Director, Army National Guard, is the lead agent for developing, implementing, and executing the ARNG OSA program.

h. Installation commanders (including Army Commands), National Guard Adjutant Generals and U.S. Army Reserve General Officer Commands (GOCOMs) will—

(1) Be responsible for the proper validation of all OSA requests generated from subordinate units, tenant activities, and designated agencies. Validator duties may be delegated to an individual within the chain of command. Validator duties and mandatory training will be conducted in accordance with the OSA Remote User's Guide.

(2) Develop internal control procedures to ensure compliance with appropriate DoD directives, this regulation and the OSA Remote User's Guide.

(3) Ensure accurate record keeping and timely submission of OSA requests.

(4) Ensure designated officials, CONUS airplane flight units and rotary wing OSA support units are networked to OSA automated remote users' system.

(5) Ensure OSA flight requests originating in CONUS, are submitted to OSACOM using JOSAC operating procedures.

(6) Ensure flight activities submit post mission reports for all missions flown.

(7) Provide notification to requesters of travel support, non-support, or schedule deviations.

(8) Brief users on procedures for initiation, cancellation, or modification of airlift requests.

(9) Designate a centralized point of contact for receiving space available travel requests, and maintain space available roster.

(10) Assign appropriate Priority, Urgency, Justification, and Category (PUJC) codes for each OSA request in accordance with DoD 4500.43.. The OSA validators will retain specific justifications for PUJC codes assigned for each airlift request for two years subject to periodic review by appropriate agencies.

(11) Personally review and approve all Senior federal travelers (all general officer and civilian equivalent) travel requests. Validation for Senior federal travel may not be delegated below the grade of Major General.

i. Commander OSACOM, will—

(1) Serve as scheduling authority for Army CONUS OSA missions, with the exception of the scheduling of Army executive jets, in accordance with the direction of the Secretary of the Army.

(2) Provide the DAS and DCSOPS required OSA utilization reports prior to submission to the Administrative Assistant for review by the Secretary of the Army.

(3) Conduct cost analysis computations of OSA military cost versus commercial cost on each OSA mission request submitted to OSACOM/JOSAC.

(4) Maintain current listing of designated Army OSA validators.

(5) Provide all designated OSA validators with access codes, user identification, and program manuals for OSACOM remote users' system.

(6) Retain all requests for aircraft support and post-mission data

for a period not less than two years after completion of the fiscal year.

j. Aviation units performing OSA mission support will conform to the reporting requirements contained in the OSA Remote User's Guide and this regulation

(1) The aviation unit commander will appoint an airlift coordinator. The airlift coordinator will perform duties in accordance with the OSA Remote User's Guide.

(2) All training flights will be reported in PMRs in accordance with OSA Remote User's Guide .

(3) Training missions may be scheduled by the aviation unit. Aviation units are strictly prohibited from scheduling training missions for the purpose of carrying passengers and or cargo.

(4) Will retain all post-mission data, including non-OSA missions, for a period of not less than two years after completion of the fiscal year.

### 3-7. Justification.

Within the policy guidance prescribed by DoD directive 4500.43 and this regulation, scheduling authorities schedule the use of aircraft for OSA missions based on the following criteria:

a. Cost analysis procedures are based on the OSA scheduling system. Commercial cost comparisons for fixed wing and rotary wing OSA are accomplished by incorporating cost elements specified in DoD directives and regulations.

b. For airlift requests meeting the criteria prescribed above, each OSA flight request will be assigned an appropriate PUJC code by the OSA validator that is established in the OSA Remote User's Guide and DoD directive 4500.43.

### 3-8. Procedures.

a. The OSA validators will publicize transportation requests and aircraft scheduling procedures within their areas of responsibility. Procedures will include requirements for units or individuals to request OSA in advance and to accept variations in departure or arrival times and will be reviewed by the authorizing official. Urgent operational demands will be considered when determining if a spread is possible in departure and arrival times. Validators will establish the PUJC codes for all OSA requests in accordance with the OSA Remote User's Guide and DoD 4500-43.. Rank or grade alone is not sufficient to justify support of airlift requests or placement in any particular PUJC.

b. Army personnel will submit requirements for official travel to the authorizing official within their chain of command.

c. Authorizing official will state requirements for official government travel and forward all approved requests to OSA validators a minimum of four duty days prior to the date of intended travel and in sufficient detail to allow the validator to assign the airlift requests with the appropriate PUJC. Signature of the senior traveling passenger is required and can not be delegated. In addition, Senior federal travelers (all general officer and civilian equivalent) will have their travel requests reviewed and approved no lower than the grade of Major General.

d. OSA validators will ensure that requests are received from a proper authorizing official with appropriate signature of the senior passenger. They will submit approved requests for Army fixed wing OSA within CONUS and rotary wing OSA within the National Capital Region (NCR) to the OSACOM. The OSACOM automated remote users' system will be used to submit OSA requests. Requests will be submitted to OSACOM within the time frames outlined below.

(1) Flight requests will normally be submitted to OSACOM not later than four duty days prior to the departure or as soon as an OSA mission requirement is identified. Priority "1" requests may be submitted telephonically and confirmed by message.

(2) Team or group travel request (as defined in DoD 4515.13-R) for fifteen or more individuals for Army OSA flights will be submitted not later than 30 days prior to departure date. This does not include requests for SAM support. A team consisting of fourteen or less individuals traveling as a group, or part of a group, may be

submitted not later than four duty days in advance of the date of desired travel or as soon as the requirement is identified.

e. Cancellations or changes to CONUS OSA flights will be transmitted to JOSAC in accordance with OSA Remote User's Guide.

f. Passenger reporting time for OSA flights is not later than 30 minutes prior to scheduled departure time.

g. Approved requests for Non-NCR Army helicopter OSA will be submitted to the validator and forwarded to the helicopter scheduling authority in accordance with local procedures. Installations will forward annual helicopter OSA utilization data to MACOMs for consolidation and forwarding to OSACOM. Because of the extensive costs associated with rotary wing operations, their use for OSA should be closely monitored and approved only when other modes of travel will not fulfill requirements.

h. Validators will not submit requests for fixed wing back up support for approved helicopter requests.

### 3-9. Data collection and use.

a. Army OSA/Non-OSA fixed wing and rotary wing OSA utilization data will be collected by OSACOM for the purpose of:

(1) Justifying use of Government aircraft in lieu of commercially available aircraft or the use of one Government aircraft in lieu of another.

(2) Recovering the costs of operating Government aircraft when appropriate.

(3) Determining the cost-effectiveness of various aspects of aircraft programs.

(4) Analysis of trends in inventory and seat utilization for each mission, type, design, and series OSA aircraft, by priority of travel, to include opportune airlift.

(5) Comparing OSA/non-OSA flying hours actually flown to those budgeted in the annual flying hour program will be accomplished by the automated post mission reporting system as collected by OSACOM.

(6) Summarizing the number of OSA/non-OSA missions flown.

(7) Summarizing passenger requests and total passengers moved by priority.

b. OSACOM will retain all requests for aircraft support and post mission data for a period of not less than two years after completion of the fiscal year. The OSA validator will retain a copy of all requests for OSA support for a period of not less than two years after completion of the fiscal year. The aviation unit will retain all post mission data, including reports on all training flights, for a period of not less than two years after completion of the fiscal year.

### 3-10. Special missions

Unless specified, approval authorities for missions authorized in this paragraph are MACOM or CNGB. They may delegate approval authority no lower than installation , U.S. Army Reserve Command (ARCOM) commanding generals or State Adjutants General. In addition to operational missions and operational support airlift, Army aircraft may be used for the following purposes:

a. *Public affairs travel.* Army aircraft may be used for public affairs in accordance with DoD 4515.13-R, Chapter 3.

b. *Orientation flight.* Army aircraft may be used for orientation flights in accordance with DoD 4515.13-R, Chapters 4 and 10.

c. *Aeromedical evacuation.*

(1) Aeromedical evacuation is applicable to eligible personnel described in DOD 4515.13, Chapter 5.

(2) Army aircraft may be used to transport U.S. Armed Forces patients (DoD 4515.13-R, Chapter 5) when deemed necessary by competent medical authority. The OSA fixed wing aircraft are not equipped to handle litters or patients requiring special medical attention en route, therefore will only transport ambulatory patients who require no en route medical treatment, except in an emergency situation.

(3) Civilian personnel, and those personnel not covered in (1) and (2) above may be provided aeromedical transportation to the nearest medical facility where immediate treatment is available. This will be done only when there is an emergency involving immediate threat to life, limb, or sight, and when suitable commercial services

(air taxi, charter air ambulance, and AE configured commercial air) are neither available, feasible, nor adequate.

*d. Other emergency situations.* The MACOM will notify HQDA, DCSOPS, ATTN: DAMO-FDV, 400 ARMY PENTAGON, WASH DC 20310-0400, when decisions are made to use Army aircraft for emergency situations and full details provided as soon as possible. When danger to public health or safety prevents prior approval, Army aircraft may transport civilian personnel in the following situations:

(1) Personnel engaged in search and rescue (AR 500-20).

(2) When severely injured or seriously ill patients in CONUS require immediate lifesaving aeromedical evacuation. This applies in major fires, earthquakes, flood, industrial or transportation accidents, epidemics, or similar natural or man-caused catastrophes.

(3) Volunteers with special search and rescue equipment who volunteer to help and have no other means of transportation. Their services must be requested by the Aerospace Rescue and Recovery Service (ARRS).

*e. Military Assistance to Safety and Traffic (MAST).* The emergency use of Army aircraft participating in the MAST program will be in accordance with AR 500-4.

*f. Security assistance missions.* Chiefs of Military Assistance and Advisory Groups (MAAG) and Defense Attaches (DATT) may approve missions for transportation on all personnel under their control. They may do this for their aircraft only in accordance with DoD 4515.13-R.

*g. Other.* Army aircraft may also be used for—

(1) Transportation to events such as memorial services, retirements, graduations, public ceremonies, field demonstrations, patient visitation, or parades for military personnel who are participating or representing the Army or DoD in an official capacity only. (Provisions of para 3-4 and 3-8d apply.) Military Air Transportation requests will not be approved for the sole purpose of attending such activities in a personal capacity.

(2) Transportation for other authorized activities such as sponsored athletic teams and bands and other welfare, morale, recreation, and chaplains programs in accordance with DOD 4515.13-R.

(3) Aerial demonstrations in support of civil or military official functions. Aerial demonstrations include static demonstrations not on a military installation and all flight demonstrations. Those performed in support of community relations activities will comply with AR 360-61.

(a) CONUS. Units assigned an aerial demonstration mission will comply with FAR 91. If parachuting is involved, FAR 105 will also apply. Aerial demonstrations off a military installation will not be conducted until coordinated with the appropriate DARR. The DARRs are listed in AR 95-2, table 6-1 and the Army Aviation Flight Information Bulletin.

(b) *Overseas.* Units assigned an aerial demonstration mission will comply with published MACOM and host nation regulations.

(4) Support of sport parachute clubs set up by installation commander under AR 215-1 and AR 215-2.

(5) Military spouse orientation flight programs under the following conditions:

(a) Flights are to satisfy specific retention or motivation objectives and are conducted in the safest and most efficient manner possible.

(b) Flights will be accommodated within the command flying hour program.

(c) Flights will be conducted in the local area only (no point-to-point transportation).

(d) Flights will not be conducted above 10,000 feet pressure altitude except in pressurized aircraft.

(e) Aircraft equipped with ejection seats will not be used for orientation flights.

(f) Flight crew member seats (with access to flight controls) will not be occupied by passengers.

(g) Passenger restrictions in paragraph 3-13 apply.

(h) Accompanied spouse travel will be in accordance with DoD 4515.13-R and paragraph 3-12h.

(i) MACOMs desiring to establish a spouse orientation program will submit a copy of the proposed plan to HQDA, DCSOPS, ATTN: DAMO-FDV, 400 ARMY PENTAGON, Washington, DC 20310-0400 for approval. When approved, the plan will be published in the MACOM supplement to this regulation.

(j) MACOMs with approved plans have approval authority for subordinate unit requests for orientation flights.

(k) Aircraft support of community relations and public information will comply with AR 360-5 and DoD 4515.13-R.

(6) Transportation of members of Congress and accompanying staff members (when approved by OCCL) in accordance with DoD 4515.13-R.

(7) All requests for transportation not provided for above, and requests for waiver to the provisions of this paragraph will be forwarded to HQDA, DCSOPS, ATTN: DAMO-FDV, 400 Army Pentagon, WASH DC 20310-0400 with information copy to HQDA, DCSLOG, ATTN: DALO-TSP-PX, 500 Army Pentagon, WASH DC 20310-0563.

### 3-11. Prohibited missions

a. Army aircraft will not be used to conduct flights for personal use. They will not be used for transportation of personnel or equipment to any place or event in an unofficial capacity.

b. Army aircraft will not be used for domicile (place of residence) to duty, or duty to domicile, transportation unless authorized by 31 USC 1344 and approved by the Secretary of the Army. Requests for approval will be forwarded to HQDA (DACS-DMC) for processing.

c. Use of Army aircraft exclusively to obtain or renew an FAA rating is prohibited.

### 3-12. Passenger policy

a. Service personnel are authorized to fly as passengers in Army aircraft while on duty and when authorized by their commander. Verbal authority is permitted. "Service personnel" are defined as:

(1) Active duty members of the Army, Navy, Air Force, Marine Corps, and Coast Guard.

(2) Active status member of Reserve Component as defined in DoD 4515.13-R.

(3) DoD civilians when on official business.

(4) Employees of other U.S. Government agencies and technical advisors to DoD component authorities when traveling on official business for DoD.

b. Army personnel traveling on OSA flights on PCS orders, TDY, Emergency Leave, Space Available, or official business are authorized to wear appropriate civilian clothing. Personnel must ensure that their dress and personal appearance are appropriate for the occasion and reflect positively on the Army.

c. Personnel will not make an aerial flight if determined medically unfit by competent medical authority, or if they are handicapped and not physically capable of caring for themselves while enplaning, deplaning, or while in flight in accordance with DoD 4515.13-R.

d. Personnel specified as eligible passengers in DoD 4515.13-R, are authorized as passengers in Army aircraft. Authorized travelers (other than spouse travel) must have travel orders or transportation authorization published by the installation travel authority. Spouse travel must have travel or transportation authorization published by HQDA (DACS-DMC-A) or the authority specified in DoD 4515.13-R. The orders must specify if travel is reimbursable or non-reimbursable.

e. Dependents authorized travel under this or other paragraphs are defined in DoD 4515.13-R.

f. Aircraft will not deviate from mission flight plans to accommodate space available passengers.

g. Policies for transportation of foreign personnel and approval authorities are specified in DoD 4515.13-R.

h. Spouse Travel

(1) Within the Department of the Army, accompanying spouse

travel eligibility will normally be limited to the spouses of the following officials:

- Secretary of the Army
- Chief of Staff
- Under Secretary of the Army
- Vice Chief of Staff
- Assistant Secretaries of the Army
- General Counsel
- General Officers ( four star General officers and three star commander of USARPAC as specified in DoD directives).

(2) As a general rule, spouses, or other dependents, may not accompany Army personnel on official business at government expense. Dependents, other than spouses, are not eligible for accompanying air travel at government expense.

(3) Spouses will only travel with their sponsors on military, or commercial aircraft, at government expense as an exception to policy and when; there is an unquestionably official function where the spouse is to actually participate in an official capacity ;or, it is deemed in the national interest as desirable because of diplomatic or public relations benefit to the country. When funding is required to support spouse travel under these circumstances. it will be for transportation only.

(4) Spouses are permitted to travel at full government expense, including per diem, when they are participating in a service-endorsed training course, and will subsequently provide voluntary service incident to such training under circumstances where the Army receives a primary and direct benefit from the spouse's participation. (Example: anti-terrorist driving training.)

(5) Spouses, either individually or part of a group, are permitted to travel at full government expense, including per diem, when performing a direct service to the Department of the Army such as providing advice or guidance as a "subject matter expert" in his/her own right when conferring with the Department of Defense officials on Department of Defense matters. In this case, being a spouse is incidental to the individual being a subject matter expert, and the circumstances of travel are not to be confused with accompanying spouse travel. Merely attending a meeting or conference, even if it is hosted by the Department of Defense component concerned on a matter related to the component's official business, is not authorized travel at government expense.

(6) The Secretary of the Army is the approval authority for all travel at government expense, via military or commercial means, for spouses of Secretariat officials, and by commercial means for all spouses of military officials of Department of the Army.

(7) All requests for spouse travel, that are to be approved by the Secretary of the Army, will be forwarded to the Administrative Assistant for processing.

(8) The Chief of Staff is the approval authority for all travel of spouses of military officials (not assigned to the Secretariat) by military means.

i. Questions or requests for waiver concerning passenger eligibility as outlined in this paragraph will be submitted to HQDA, DACS-DMC-A, 202 ARMY PENTAGON, WASH DC 20310 - 0202.

### **3-13. Passenger restrictions**

- a. Passengers are restricted from the following types of flights:
- (1) Maintenance or engineering test flights.

(2) Aerobatics flights.

(3) Aerial demonstrations (only mission essential personnel authorized).

(4) Flight crew emergency procedures training.

(5) Night Vision Device (NVD) qualification or refresher training in accordance with the Aircrew Training Manual (ATM).

(6) Aeronautical record attempts.

(7) Aircraft acceptance flights.

b. Personnel on the aircraft during the above operations will be limited to the minimum essential crew and those making evaluations or performing required maintenance checks. Army aircraft will be used for authorized purposes only.

## **Section II Safety**

### **3-14. Safety functions**

Commanders will implement the mishap prevention program set up by AR 385-95.

### **3-15. Mishap reports, investigations, and release of information**

a. Procedures for investigating and reporting aircraft mishaps are prescribed in AR 385-40.

b. Policy and procedures for reporting casualties and notifying next of kin of personnel involved in aircraft accidents are prescribed in AR 600-800-1.

c. Requests about aircraft mishap reports will be answered per AR 385-40.

d. Requests for information under the Freedom of Information Act will be processed per AR 25-55.

### **3-16. Risk management**

a. Commanders will integrate risk management into aviation mission planning and execution at every level. (See chap 5, Risk Management, of TC 1-210, the Commander's Guide to the Aircrew Training Manual, as a guide for implementation of this program.)

b. The risk management process begins at mission conception and continues until mission completion. Apply the process with the goal of eliminating hazards where possible and reducing residual risks to acceptable levels.

c. When possible, the hazard assessment step of the process should be documented by the mission developer/planner. Chapter 5, TC 1-210 explains formalized assessments. If used, file assessment documentation with the mission briefing per FM 1-300.

### **3-17. Crew endurance**

a. Commanders will design a crew endurance program tailored to their unit mission and include it in their standing operating procedures (SOP). Table 3-1 is a guide for scheduling crew members for flight duties.

b. Crew endurance is an integral part of the overall risk management program. It is used to control risks due to sleep deprivation or fatigue and to prescribe thresholds to trigger command decisions whether to accept those risks.

c. Commanders should consider the advice of the flight surgeon and aviation safety officer in designing their programs.

**Table 3-1**  
**Crew endurance guide**

1 Time Period Hours	2 Maximum Duty Period	3 Maximum Flight Time	4 Environment Relative Factor
24	16	8	Day 1.0
48	27	15	
72	37	22	Day Contour & Low Level 1.3
168 (7 days)	72	37	
720 (30 days) (Peace)	288	90	Low Level Instrument 1.3 1.4
720 (30 days) (Mobilization)	360	140	Night 1.4
			Day NOE 1.6
			Night Terrain 2.1
			Night Vision Devices 2.3
			Chemical MOPP 3.1

**Notes:**

Example: The stress and fatigue experienced in 1 hour of day nap-of-the-earth (NOE) flight is equal to 1.6 hours of day standard flight. If a crew member flies day NOE in chemical mission-oriented protective posture (MOPP), the larger factor (3.1) will be used. The flight time shown in column 3 will be adjusted by the factors in column 4.

**3-18. DA Form 2696-R (Operational Hazard Report)**

DA Form 2696-R will be used to notify commanders and safety councils of anything affecting the safety of Army aircraft or related personnel and equipment. The commander will have reported hazards investigated immediately and will correct unsafe conditions. (See AR 385-95 for instructions on completing DA Form 2696-R).

**Section III**  
**Aircraft Maintenance**

**3-19. Maintenance test flights**

- a. Maintenance test flights (MTF) will be conducted per TM 1-1500-328-23.
- b. Maintenance test flights for aircraft under bailment to contractors will be test flown per Federal Acquisition Regulations unless required by the terms of the contract.
- c. Aviators performing maintenance test flights must be qualified and current per paragraph 4-29 or 4-30.

**3-20. Maintenance operational check**

- a. Authorized personnel will perform maintenance operational checks per TM 1-500-328-23, DA PAM 738-751 and applicable aircraft technical manual.
- b. Personnel who are authorized to start, run up, and taxi airplanes for the purpose of maintenance operational checks and are not qualified per paragraph 2-1a(1), (2), (3) or (4) will—
  - (1) Undergo appropriate normal and emergency procedures training conducted by an IP, SP or ME in the specific mission, type, design, and series aircraft.
  - (2) Be evaluated semiannually by an IP, SP, or ME on all functions he or she is required to perform.
  - (3) Have written authorization from the commander. This authorization must specify the operations and checks permitted and be posted in the maintenance office.
- c. Personnel who are not qualified per paragraph 2-1a(1), (2), (3), or (4) are prohibited from starting, running up, or taxiing helicopters.
- d. Commanders may authorize nonrated personnel to start, operate, and stop aircraft auxiliary power units (APUs). These persons will—
  - (1) Be trained on all functions he or she is authorized to perform.

- (2) Have written authorization by the commander.

**Section IV**  
**Army Aircraft Performance Records**

**3-21. Requests for performance records**

The policy for handling requests from the Services for authority to establish performance records by military aircraft is prescribed in DOD 5410.19. It authorizes periodic official demonstrations of military aircraft for the purpose of establishing new performance such as speed and endurance records.

**3-22. Purpose of performance records**

The following policies apply to the use of Army aircraft for the purpose of performance records.

- a. Only Service aircraft will become eligible to establish new performance records. These aircraft will be eligible 6 months after the first aircraft is delivered to an operational unit.
- b. Service requests to engage in public demonstrations to establish performance records and release information on new performance records will be submitted to OASD(PA), for approval or disapproval, after coordination—
  - (1) By OASD(PA) within DOD.
  - (2) With other appropriate departments of the Government.
  - (3) With the National Aeronautics Association.
- c. Requests in paragraph b above will be accompanied with a description of the specific aircraft, full justification of the purpose of the record attempt, flight plans, and information supporting the attempt.
- d. Requests by MACOMs for authority to establish performance records by military aircraft will be submitted to HQDA (DAMO-FDV), WASH DC 20310-0460, at least 60 days prior to any proposed record attempt.

## Chapter 4 Training

### Section I Training Program and Literature

#### 4-1. General

The aircrew training program (ATP) will be in accordance with TC 1-210 and the appropriate aircraft ATM.

#### 4-2. Waivers to requirements

a. Unit waivers to primary aircraft ATP requirements may be granted only by these authorities.

(1) Commanders of MACOMs.

(2) Commander, United States Army Reserve Command (USARC).

(3) Chief, National Guard Bureau.

b. Individual waivers to primary aircraft ATP requirements may be granted by the first commander, Colonel (O6) or above, in the individual's chain of command.

c. Waivers will state the specific requirement that is to be waived.

#### 4-3. Publications

Aircraft operator's manuals and checklists are the primary references governing the operation of a specific aircraft. ATM, field manuals, technical manuals, and training circulars will be used as required. When differences exist between other publications and this regulation, this regulation has precedence. DA Forms 2028 (Recommended Changes to Publications and Blank Forms), recommending changes to these publications, will be submitted through the aviation unit commander to the proponent of the manuals.

#### 4-4. Aircrew information reading files

Aviation units will establish and maintain aircrew training and information reading files per AR 385-95 and TC 1-210. Assigned aircrew personnel will read and remain familiar with these files.

#### 4-5. Aircrew training program

a. The ATP standardizes training and evaluation to ensure combat readiness.

b. The ATP outlined in the ATM is mandatory for all military aviators assigned to operational aviation positions and all other crew members specified in ATMs. ATP requirements include hours, tasks, and iterations identified in appropriate ATMs; synthetic flight training systems (SFTS) requirements; readiness level (RL) progression; and annual proficiency and readiness test (APART). Aviators assigned or attached to another Service will meet the requirements of that service. Department of the Army Civilian (DAC) crew members will be trained and evaluated as specified in writing by the commander as necessary to meet the requirements of the job description.

c. The commander may excuse an aviator scheduled for separation or retirement from active duty from all ATP requirements. The aviator may be excused beginning no sooner than 6 months before scheduled retirement or separation date. This does not apply to those who have initiated action to join a RC aviation unit. Aviators who are excused from ATP requirements are prohibited from performing crew member duties.

#### 4-6. Aircraft qualification/refreshers training

a. Qualification training.

(1) Formal training at other DA designated training bases may be conducted upon receipt of approval by HQDA DCSOPS, ATTN: DAMO-TRO. ARNG specific requests will be routed through CNGB, ATTN: NGB-AVN-O to DAMO-TRO.

(2) Unless otherwise approved by DAMO-TRO, local transition training will not be conducted when a formal DA qualification course exists. Exceptions may be granted on an as required basis by DAMO-TRO, in which case training will be according to an appropriate MACOM approved POI.

(3) To ensure standardization throughout Army aviation, flight training will be conducted using the training and evaluation requirements prescribed in the appropriate ATM. Flight Training Guides (FTGs) are authorized at USAAVNC and other DA designated training bases to describe unique tasks, conditions, standards, policies, and procedures that are not in the ATM.

(4) Training an aviator in an aircraft category other than that in which he or she is qualified to fly is permitted only in a formal school course (DA Pam 351-4). An Army aviator qualified in an aircraft category by another U.S. Service is authorized local qualification training in that category. Local qualifications will be conducted under the auspices of an official course utilizing a DA approved POI.

(5) Aviator and instructor pilot qualification training in nonstandard aircraft will be conducted per Chapter 9.

(6) Those aviators who successfully complete qualification training conducted by the active Army, ARNG, USAR, or other U.S. military service will be awarded an additional military occupational specialty (MOS) or additional skill identifier (ASI) (AR 611-112).

(7) A statement of completed aircraft or aircraft system (NVG, ESSS, and so forth) qualification training will be entered in the remarks section of DA Form 759. The personnel officer will include the statement in the member's military personnel records.

b. Refresher training. When an aviator has not flown within the past 180 days, the aviator will receive the appropriate flight refresher training prescribed in the ATM. The gaining command is responsible for refresher training except for aircrew members reassigned to overseas commands for duty in an operational flying position. If reassigned overseas, the losing command is responsible for the training. When the losing command does not have training resources available, they will request assistance from the next higher headquarters.

#### 4-7. Annual proficiency and readiness test

a. The annual proficiency and readiness test (APART) will be conducted per TC 1-210 and appropriate ATM. The APART is given to each RL 1 and DAC crew member within the APART period. For DAC crew members, individual components of the APART may be accomplished in any calendar quarter designated by the commander.

b. APART results will be entered on DA Form 759.

#### 4-8. Emergency procedures training

Training in emergency procedures will be conducted per ATMs. Training will be in dual controlled aircraft. A qualified IP or SP who is current in that mission, type, design, and series will be at one set of the controls.

a. Airplanes.

(1) Single engine training in multi-engine airplanes may be conducted under the following conditions only:

(a) Complete engine stoppage (propeller or turbine stopped) will be in visual flight rules (VFR) conditions at least 4,000 feet above ground level (AGL).

(b) Simulated engine shutdown on climbout after takeoff may be accomplished if indicated airspeed is at or above the prescribed velocity of safe single engine (VSSE) OPERATION for that airplane. Exceptions are granted for those aircraft which are specifically authorized V1 engine cuts.

(c) The runway used for landing must be at least 4000 feet long and meet the criteria in table 5-1.

(2) Touch-and-go landings may be performed under the following conditions:

(a) Aircraft must have two sets of controls.

(b) IP or SP must be at one set of controls.

(c) Runway used must meet accelerate and stop distance requirements plus 2,000 feet.

(d) Training involving touch-and-go landings will be done according to the appropriate ATM.

b. Helicopters.

(1) Hydraulics-off, autorotations (except from a hover), and autorotative touchdown emergency procedures training in single engine

helicopters will be conducted only during aviator and instructor pilot qualification and transition training per formal POI at Department of the Army designated training bases. Touchdown emergency procedures are also authorized for—

(a) IPs and SPs designated to conduct touchdown emergency procedures in single engine helicopters at designated training bases.

(b) Directorate of Evaluation and Standardization (DES) IPs and SPs.

(c) Local qualification training in OH-58A/C, AH-1, UH-1 and OH-6 helicopters.

(d) Experimental test pilots while conducting authorized flight testing or training.

(2) Procedures must be conducted in designated training locations free from obstructions. There must be air-to-ground communications and crash and fire rescue equipment available. Night training areas will be designated and used.

(3) Unannounced touchdown autorotations will not be made except for IP and SP training or evaluations.

(4) Autorotations with power recoveries and terminations with power will be conducted per the ATM.

(5) In multi-engine helicopters, practice touchdown autorotations are prohibited.

#### 4-9. Hands-on performance test

Each crew member must successfully complete periodic hands-on performance tests by an IP, SP, IE, ME, FI, or SI per the appropriate ATM/ATP. Hands-on tests are:

a. *Standardization flight evaluation.* This flight consists of visual flight maneuvers and/or procedures conducted in each aircraft mission, type, design, and series group (para 4-19) an aviator or non-rated crew member is required to perform. The evaluation is conducted to determine the examinee's ability to perform assigned flight duties. The evaluation will—

(1) Consist of the flight evaluation described in the appropriate ATM.

(2) Be conducted by a designated IP, SP, FI, or SI to establish initial qualification in an aircraft series and, once each year.

b. *Instrument flight evaluation.* An instrument flight evaluation will determine examinee's ability to perform assigned flight duties under IMC.

(1) The evaluation will be conducted—

(a) Per TC 1-210 and the appropriate ATM.

(b) Annually, in an aircraft equipped with dual controls, by an IE qualified and current in aircraft category or in a compatible simulator by an IE qualified in the aircraft category. Simultaneous evaluations of two aviators may be conducted if both perform the maneuvers and procedures required by the ATM.

(c) Annually in the examinee's primary and alternate aircraft if dual rated and required to fly both categories.

(d) With instructor pilots in AH-1, AH-64, OH-58, and OH-6 aircraft, provided they are designated by the commander as an IP in the aircraft being flown, have undergone an instrument flight evaluation in the aircraft category conducted by an IE during APART or Readiness Level (RL) progression, and are current per paragraph 4-18.

(2) The commander may direct use of a compatible flight simulator if circumstances preclude safe, affordable, or timely evaluation in the aircraft.

(3) Unusual attitudes, simulated engine shutdown or engine failures, and autorotations will not be initiated while under IMC. An IE, IP, or SP qualified and current in the aircraft being flown must be at one set of the flight controls when performing these maneuvers. If the IE is not also an IP or SP, the IE must be evaluated to perform these maneuvers.

c. *Proficiency flight evaluation.* This evaluation is administered to any rated or nonrated crew member in any aircraft series group (para 4-19) or aircraft system he or she is required to operate. The evaluation will be conducted—

(1) At the discretion of the commander.

(2) At the direction of HQDA.

(3) By an IP, SP, IE, ME, FI, or SI per the appropriate ATM/ATP.

(4) To determine an individual's proficiency and/or currency.

(5) To determine which phase of training is appropriate for entry into or continuing in the ATP.

(6) No-notice proficiency evaluations may be written examinations, oral evaluations, aircraft flight evaluations, or compatible flight simulator evaluations.

d. *Post-mishap flight evaluation.* This flight evaluation is administered to an aviator or nonrated crew member to determine their ability to perform required duties following an aircraft mishap. Aviators or nonrated crew members performing crew duties involved in a Class A or B mishap will be suspended from flight duties until successful completion of a flight evaluation. The evaluation will be conducted in the same mission, type, design, and series aircraft in which the mishap occurred. Aviators or nonrated crew members performing crew duties involved in a Class C mishap may be suspended from flight duties and required to successfully complete a flight evaluation at the discretion of the commander. An IP, SP, FI, or SI will conduct the evaluation per the appropriate ATM. (See AR 40-501 for medical release requirements prior to flight.)

e. *Medical flight evaluation.* This flight evaluation measures an aviator's or nonrated crew member's ability to perform required duties after incurring a medical disability. The evaluation will be administered on the recommendation of the flight surgeon. The evaluation of flight duties will be conducted by an IP, IE, SP, FI, or SI per the appropriate ATM.

f. *Maintenance test pilot evaluator and maintenance test pilot evaluation.* This evaluation encompasses maintenance test flight maneuvers and is conducted in each aircraft series group (para 4-19) which the aviator is required to test fly. The evaluation will be conducted—

(1) To establish MP or ME qualification per the appropriate ATM.

(2) By a designated ME qualified and current in the aircraft series group being flown.

(3) During the APART in the primary aircraft and during each training year in alternate and additional aircraft.

(4) National Guard and U.S. Army Reserve personnel will take the MP or ME evaluation during the same quarter as their standardization flight evaluation.

#### 4-10. Failure to meet ATP requirements

a. When ATP requirements are not met the commander will investigate. After investigation, the commander will—

(1) Take one of the following actions:

(a) Authorize the crew member up to 30-day extension to complete the requirements. The 30-day extension will start after the commander completes his investigation. Commanders are not authorized to grant themselves a 30-day extension.

(b) Request a waiver of requirements per paragraph 4-2.

(c) Place the crew member before a flight evaluation board per AR 600-105.

(2) Enter restrictions imposed and extensions granted in the Individual Aircrew Training Folder (IATF).

(3) Enter extensions and waivers granted on the crew member on DA Form 759.

(4) Restrict aviators from performing pilot in command duties in the aircraft (primary, additional or alternate) until ATP requirements are met.

b. For primary aircraft, if additional time or waiver is not granted, or if requirements are not met within the authorized period, the commander will—

(1) Suspend aviator from aviation service.

(2) Place a military aviator before a flight evaluation board (AR 600-105).

(3) Process a DAC aviator per appropriate Federal Civil Service regulations.

(4) Terminate flying status order for a nonrated crew member per AR 600-106.

c. Additionally, a crew member who fails a hands-on performance test will be restricted from performing the flying duty (para 2-6) for which evaluated. The restriction will apply to all aircraft with similar operating and handling characteristics as listed in paragraph 4-19. Restrictions will be listed in the IATF and will remain in effect until successful completion of a reevaluation.

(1) When the failure is in the crew member's primary aircraft, the commander:

(a) Must reclassify the individual to the appropriate RL.

(b) Must authorize additional training if necessary.

(c) For aviators, reevaluate or impose a temporary suspension from flying duties. If suspension is imposed, flight evaluation board provisions of AR 600-105 apply.

(d) For nonrated crew members, re-evaluate or remove from flight status per AR 600-106.

(2) When the failure is in a crew member's additional or alternate aircraft, the commander must:

(a) Reclassify the individual to the appropriate RL.

(b) Authorize additional training if necessary.

(c) Reevaluate or restrict the crew member from performing flight duties in that aircraft.

#### 4-11. Synthetic flight training system requirements

a. Active and RC rotary-wing aviators must use the SFTS for their primary aircraft. Annual training requirements are based upon distance to the simulator device.

b. Training requirements may be reduced based upon distance the aviator must travel to the SFTS (except FAC3 designated aviators). For distance considerations the following minimum training requirements apply:

(1) Active component aviators. (Distance expressed is from the aviator's station of assignment per AR 55-60.)

(a) 0-25SM - per the ATM.

(b) 26-100SM - 12 hours.

(c) 101-200SM - 6 hours.

(d) 201SM and over - no mandatory hour requirement.

(2) Reserve component aviators. (Distance expressed from aviator's flight facility to the SFTS facility.)

(a) 0-100SM - 12 hours.

(b) 101-200SM - 6 hours.

(c) 201SM and over - no mandatory requirement.

c. Units located beyond 201SM should set up SFTS programs when it is cost effective and feasible.

d. SFTS requirements may be prorated per TC 1-210.

e. For aviators whose primary aircraft does not have a compatible simulator (table 4-1), annual SFTS requirements will be determined by the commander. A maximum of 6 hours semiannually may be credited toward rotary wing aviators flying hour minimums in a non-compatible SFTS device.

f. Helicopter SFTS simulators are listed in table 4-1.

g. Fixed-wing aviators (primary aircraft) may receive up to 6 flight hours credit toward ATM requirements utilizing a compatible simulator. Flight hour credit must be approved by the MACOM or NGB.

**Table 4-1**  
**Synthetic flight training system**

**Designation:** UH-1 Instrument flight trainer, SFTS device 2B24  
**Compatible aircraft:** UH-1

**Designation:** CH-47 Operational flight trainer, SFTS device 2B31  
**Compatible aircraft:** CH-47

**Designation:** AH-1 Operational flight trainer/weapons system simulator, SFTS device 2B33  
**Compatible aircraft:** AH-1

**Designation:** UH-60 Operational Flight Trainer, SFTS device 2B38  
**Compatible aircraft:** UH-60

**Table 4-1**  
**Synthetic flight training system—Continued**

**Designation:** AH-64 Combat mission simulator, SFTS Device 2B40  
**Compatible aircraft:** AH-64

**Designation:** AH-64 Cockpit weapon emergency procedures trainer  
**Compatible aircraft:** AH-64

#### 4-12. Civilian flight time for RC aviators

Civilian flight time or tasks may be credited toward the ATM requirements of RC aviators at the commander's discretion.

a. Tasks performed in Army aircraft by civilians will be credited toward applicable ATM requirements.

b. Commanders may give credit for tasks performed in civilian aircraft if the tasks are similar in all respects to the ATM task requirements.

c. Flight time acquired in Army aircraft by RC aviators while employed by the Government, or flight time acquired in civilian aircraft will not be used as the following:

(1) Training instead of unit training assemblies.

(2) Additional flight training periods (AFTP).

(3) Entitlement to aviation career incentive pay, total operational flying duty credit, or retirement points.

#### 4-13. Additional flight training periods

a. The AFTP program allocates additional flight training periods for RC aircrews and flight surgeons to reach and maintain required levels of proficiency. All RC aviators, flight surgeons, and nonrated crew members in aviation service may take part in the AFTP program. The program will be per AR 140-1.

b. Entitlement to pay and allowances for AFTPs is authorized as inactive duty training as prescribed by DOD Military Pay and Allowances (MPA) Entitlement Manual.

#### 4-14. Aeromedical training

Flight crew members will receive aeromedical and low pressure/high altitude training per the appropriate ATM and TC 1-210.

#### 4-15. Ejection seat training

a. Requirement. Flight crew members, maintenance personnel, and passengers on ejection seat equipped aircraft must complete qualification and annual refresher training per TC 1-210.

b. Waivers. MACOMs, and Commander, USAAVNC, may waive training requirements for passengers. The pilot in command will brief the passengers to ensure that ejection seat safety practices and procedures are understood.

#### 4-16. Deck-landing operations training

a. Requirement. Flight crew members must complete deck landing qualification (DLQ) and be current with the most current Army/Air Force Deck Landing Operations Memorandum of Understanding (MOU) prior to conducting Naval deck landing operations.

b. Units may obtain a copy of the most current Army/Air Force Deck Landing Operations MOU by writing HQDA, DCSOPS, ATTN: DAMO-TRS, 400 Army Pentagon, Wash. DC 20310-0400.

#### 4-17. Aircraft survivability equipment/electronic warfare training

a. An aircraft survivability equipment (ASE)/electronic warfare (EW) training program will be established in tactical units to train flight crew members on the operation and effectiveness of ASE against electronic threats. The training will be administered and evaluated per the appropriate ATM and TC 1-210.

b. Maximum use of the ASET II interactive courseware, the aircraft specific ASET III embedded training, and the ASET IV force on force trainer as directed.

#### 4-18. Currency

a. If 60 days have elapsed since the last flight as pilot or pilot in command in the aircraft mission, type, design, and series (or series, group, para 4-19) to be flown, the aviator will be administered a proficiency flight evaluation per the ATM.

b. Night vision device/ systems currency will be per TC 1-210 and appropriate ATM.

c. If 90 days have elapsed since the last flight as a nonrated crew member in the aircraft mission, type, design and series (or series, group, para 4-19) to be flown, the AO, CE, FE, FI, MO, or SI crew member will receive a proficiency flight evaluation per the appropriate ATM.

#### 4-19. Similar aircraft

Series aircraft with similar operating and handling characteristics are grouped below. Currency in any one series aircraft will satisfy the requirement for all aircraft within the series or group. Separate currency is required for all other aircraft.

a. UH-1, H, V; EH-1H; EH-1X.

b. AH-1S, E, P, F, TH-1S.

c. C-12 C, D, F, J, L, R.

d. RC-12D, G, H.

e. RC-7B

f. RC-12K, N, P, Q.

g. OH-58A, C; TH-67.

h. OH-58D, OH-58D(I).

i. OH-6, OH-8, MH-6, AH-6, H-500, H-530.

j. UH-60A, L, Q; EH-60A; MH-60A, L.

k. CH-47D, MH-47D, MH-47E.

l. C-23A, B, B+.

m. C-26A, B.

n. C-20E, F, J.

o. UC-35 A.

## Section II

### Flight Crew Members

#### 4-20. Flight crews

Unit commanders must establish, in writing, formal flight crew qualification and selection programs. Programs will contain qualification and selection criteria and evaluation requirements. Instructor pilots and safety officers will aid commanders in the selection process. Flight crew members will be designated in writing, by the commander, specifying the duties and flight crew stations that they are authorized to occupy per TC 1-210.

#### 4-21. Pilot in command

The pilot in command (PC) will be—

a. Responsible and have final authority for operating, servicing, and securing the aircraft he or she commands.

b. Selected per paragraph 4-20 for each flight or series of flights.

c. Qualified and current in the aircraft mission, type, design, and series.

d. The UT, IP, SP, or ME when instructing or evaluating at a cockpit station with access to the flight controls. The IE will be the PC when instructing or evaluating in the aircraft in which he or she is qualified, current, and at the controls.

e. Listed in the flight plan or unit operations log.

f. Responsible for crew and passenger briefings.

g. Briefed by a commander-designated briefing officer before each mission and perform a brief-back. UTs, IPs, SPs, MEs, IEs, FIs, and SIs who are evaluating or instructing from other than the pilot or copilot station will participate in the mission briefing and brief-back.

#### 4-22. Air mission commander

When two or more aircraft are operating as one flight, the unit commander will designate an air mission commander to be in command of all aircraft in the flight. The designation of air mission commander is an assignment of command responsibility and is not a

crew duty assignment. Air mission commanders will participate in mission briefings and brief backs.

#### 4-23. Pilot

a. The pilot (PI), when designated, will be—

(1) Qualified and current in the aircraft mission, type, design, and series.

(2) Briefed by the PC.

(3) Listed on the flight plan or unit operations log.

b. Flight trainees undergoing training and personnel performing limited cockpit duties per paragraph 2-4 may perform pilot duties when an IP is at one set of controls. The IP must be qualified and current in the mission, type, design, and series aircraft being flown.

c. When the operators manual or mission requires a pilot and copilot as minimum crew, two pilots qualified and current in the mission, type, design, and series aircraft to be flown are required. When an IP qualified in the mission, type, design, and series aircraft being flown is at one set of controls, the following additional personnel meet this requirement:

(1) Persons undergoing authorized training.

(2) Personnel performing limited cockpit duties per paragraph 2-4.

(3) Aviation unit commanders, DA Regional Representatives (DARR) to the FAA, and MACOM aviation officers in the grade of O5 and above in operational aviation positions.

(4) Personnel approved by a MACOM commander, in writing, when the following conditions have been met:

(a) Flight is for determining the capabilities and/or combat effectiveness of the aircraft.

(b) NVD or NOE flight must be specifically authorized.

(c) Flight will be in VFR conditions.

(d) Simulated emergency procedures will not be conducted.

(e) Flight is approved by the MACOM commander providing the aircraft. If any of the above conditions cannot be complied with, a waiver may be requested per paragraph 1-7.

(5) Authority granted in (4) above will not be further delegated below the two star level.

#### 4-24. Copilot

a. The copilot (CP), when designated, will assist in the performance of cockpit tasks as directed by the PC. Except as stated in b below, any aviator may occupy a CP station and perform designated copilot duties in any aircraft.

b. Two aviators current in the aircraft category being flown are required for flights in forecast instrument meteorological conditions (IMC). Flight trainees meet this requirement when undergoing instrument training and an IP or IE current in the mission, type, design, and series aircraft being flown is at one set of controls.

#### 4-25. Unit trainer

The unit commander may appoint unit trainers (UTs) to conduct specialized training to assist in unit training programs. UTs are prohibited from conducting emergency maneuvers or emergency procedures training in aircraft. UTs are also prohibited from evaluating ATM base and special tasks. Commanders may authorize UTs to instruct from pilot, copilot, and/or nonflight crew stations. They may also authorize UTs to validate successful completion of required training; for example, border and corridor qualifications, local area orientation, and other locally directed requirements. When performing UT duties, the UT must be qualified per the appropriate ATM and current in the aircraft being flown.

#### 4-26. Instructor Pilot

a. The instructor pilot (IP) will train and evaluate aviators, non-rated crew members, and other personnel in designated aircraft per the ATM.

b. The IP candidate will have at least:

(1) 500 hours pilot time in aircraft category.

(2) 250 hours in aircraft type/design.

(3) 50 hours as PC in aircraft type/design.

(4) 48 hours in aircraft type/design within the last six months.

Twenty-five hours should be in Night Vision Systems (NVS) for those aircraft equipped with NVS.

(5) Letter of recommendation from unit commander.

c. Waiver authority in b(2), (3), and (4) above is Commander, USAAVNC or his designated representative. Waiver consideration will be on a case by case basis as substantiated by the requirement in b(5) above.

d. To become qualified as an IP for helicopters or airplanes, an aviator must successfully complete one of the following:

(1) Helicopters.

(a) A DA IP course in the mission, type, and design aircraft in which IP duties are to be performed.

(b) An IP equivalency evaluation administered by an standardization instructor pilot (SP) selected by DAMO-TRO, in the mission, type, and design aircraft in which IP duties are to be performed. Commanders will coordinate with DES (ATZQ-ES) Fort Rucker, prior to submitting request for equivalency evaluation to DAMO-TRO.

(c) Additional IP qualifications within series group (para 4-19) may be accomplished locally.

(2) Airplanes.

(a) A DA IP course in the aircraft category in which IP duties are to be performed.

(b) An IP equivalency evaluation administered by an SP selected by DAMO-TRO in the aircraft category in which IP duties are to be performed. Commanders will coordinate with DES (ATZQ-ES) Fort Rucker, prior to submitting a request for equivalency evaluation to DAMO-TRO.

#### **4-27. Instrument examiner**

a. The instrument examiner (IE) will conduct instrument training and instrument flight evaluations per the ATM.

b. To become qualified as an IE, an aviator must—

(1) Successfully complete a course of instruction for IEs at the USAAVNC, or

(2) Successfully complete an IE equivalency evaluation administered by an IE selected by DAMO-TRO. The examinee must be an IP in the aircraft category in which evaluation is conducted. Commanders will coordinate with DES (ATZQ-ES) Fort Rucker, prior to submitting a request for equivalency evaluation to DAMO-TRO.

c. Be designated in writing by the commander for each category aircraft performing IE duty.

d. Simulator only IE's not current in the aircraft category must be evaluated by a current IE annually.

#### **4-28. Standardization instructor pilot**

a. The SP will train and evaluate IPs and SPs. They may train and evaluate all rated and non-rated crew member as well as other personal in the designated aircraft per the ATM. SPs have technical supervision of the unit aviation standardization program as specified by the unit commander. He or she advises the commander at all levels of aviation standardization within the command.

b. Qualified IPs will be designated in writing as SPs by unit commanders and be qualified and current in the aircraft to be flown. Commanders may authorize SPs to instruct and evaluate from pilot, copilot, and/or nonflight crew station.

#### **4-29. Maintenance test pilot**

a. Aircraft with test flight procedures published in the appropriate ATM will be test flown by qualified maintenance test pilots (MPs) only.

b. To become qualified as a MP, aviators must successfully complete one of the following:

(1) Maintenance Manager/Maintenance Test Pilot Course (MM/MTPC).

(2) An equivalency evaluation administered by an maintenance test pilot evaluator (ME) selected by DAMO-TRO. Commanders will coordinate with DES (ATZQ-ES) Fort Rucker, prior to submitting a request for equivalency evaluation to DAMO-TRO. Individual

must show successful completion of the Maintenance Managers portion of MM/MTPC.

(3) Waivers may be granted on a case-by-case basis through the appropriate MACOM aviation office to HQDA, ATTN: DALO-AV, with information to DAMO-TRO.

c. They must be qualified in the aircraft to be flown and meet the standardization requirements of the appropriate ATM. MPs will comply with procedures in TM 1-1500-328-23 and the appropriate aircraft maintenance test flight (MTF) manual.

d. Contractor maintenance test pilots will be qualified by attending the Track portion of MM/MTPC (flight only) or by b(2) above (Maintenance Managers portion not required).

e. Fixed wing aircraft MPs are not required to be graduates of any MM/MTPC; however, they must meet the task iteration and initial/annual evaluation requirements of the appropriate ATM.

#### **4-30. Maintenance test pilot evaluator**

a. The maintenance test pilot evaluator (ME) will train and evaluate MPs and other MEs in designated aircraft per the appropriate ATM.

b. At least 50 hours of MP time in the aircraft for which ME duties are sought is desired.

c. To become qualified as an ME, an MP must successfully complete the following:

(1) Training and evaluation in methods and fundamentals of instruction from an IP, SP, or DES designated ME.

(2) An initial evaluation, as described in the appropriate ATM, administered by a DES designated ME.

(3) Successful completion of the initial ME evaluation will be documented in the remarks block of DA Form 759.

d. DES will identify MEs in the field who show exceptional abilities in maintenance test flight standardization. These individuals will be selected during DA flight standardization visits and will receive a designation from DES, USAAVNC.

#### **4-31. Experimental test pilot**

The experimental test pilots (XP) are graduates of the U.S. Naval Test Pilot School or other accredited test pilot schools, who perform experimental and engineering flight tests at the U.S. Army Airworthiness Qualification Test Directorate (AQTD) and at other facilities authorized by the Department of the Army.

#### **4-32. Nonrated crew member**

Nonrated crew members perform duties on the aircraft which are essential to the operation and specific flight mission. They will be—

a. In a position on the MTOE or TDA per AR 600-106.

b. MOS qualified in the aircraft mission, type, and design (flight engineers, crewchiefs, and AOs) or MOS qualified to perform specific missions, that is, (flight medic, electronic weapons operators, steward, and so forth).

c. Trained to perform their duties per TC 1-210 and the appropriate ATM.

#### **4-33. Nonrated crew member instructor**

The Nonrated crew member instructor (FI) trains and evaluates nonrated crew members in their designated aircraft or aircraft mission per the ATM. To become qualified as an FI the crew member must meet the requirements of paragraph 4-32 and complete one of the following:

a. A DA course in the aircraft mission, type, and design in which FI duties are to be performed.

b. An FI equivalency evaluation administered by an SI selected by HQDA, in the type aircraft in which the FI duties are to be performed.

(1) Commanders will coordinate with DES (ATZQ-ES) Fort Rucker, AI prior to submitting a request for an equivalency evaluation to DAMO-TRO.

(2) An equivalency evaluation only applies to MOSs with a DA course.

c. If a DA course is not available for their specific aircraft, commanders may select a nonrated crew member that is MOS

qualified to perform FI duties. The selected individual will be trained and evaluated by an IP, SP, or an SI per the appropriate ATM.

#### **4-34. Nonrated crew member standardization instructor**

The standardization instructor (SI) trains and evaluates nonrated crew members, FIs and other SIs. He assists the unit SP with the supervision and maintenance of the standardization program. To be designated by the commander as an SI, the requirements in paragraph 4-32 and 4-33 must be met.

### **Section III Standardization**

#### **4-35. Aviation standardization program**

a. The aviation standardization program is designed to ensure a high degree of efficiency in accomplishing the combat mission of the aviation force. This will be achieved by command supervision, employment of standard aviation tasks, use of standard publications, and maintenance of a disciplined aircrew force by administration of frequent tests and flight evaluations. b. Commanders will—

- (1) Implement standardization policies and procedures.
- (2) Ensure that Army aircraft are operated according to standard procedures in ATMs and operator's manual.
- (3) Designate evaluators, instructors, examiners and trainers in support of installation standardization committees.
- (4) Ensure that required training, tests, and flight evaluations are completed.
- (5) Review and approve policies of standardization programs.

#### **4-36. U.S. Army Aviation Commander's Conference**

a. Mission. Army aviation commanders meet annually to recommend general policy for implementing the U.S. Army Aviation Standardization Program. They review issues affecting the capability of commanders to perform missions with aviation assets.

b. Composition. The conference chairman is the Commander, USAAVNC. Membership consists of aviation unit commanders (O6 and above), MACOM aviation officers, and other persons designated by the chairman.

c. Direction and control.

(1) Commanders will meet in formal session at least annually at the call of the chairman. Approved conference minutes will be forwarded to members for further distribution to subordinate aviation units.

(2) The chairman will carry out functions relating to the standardization program on a continuing basis and will monitor tasking requirements resulting from the commander's conference. Activities are subject to review by the full membership at the next regular meeting.

(3) Funds for travel, per diem, and overtime, if needed, will be provided by the member's parent organization.

d. Correspondence. Issues to be presented at the annual conference will be addressed to: Commander, U.S. Army Aviation Center, ATTN: ATZQ-TD, Fort Rucker, AL 36362-5214. Other standardization and training issues requiring resolution throughout the year should be sent to Commander, U.S. Army Aviation Center, ATTN: ATZQ-ES, Fort Rucker, AL 36362-5214 as problems arise.

#### **4-37. MACOM, USARC and numbered Army aviation standardization committees**

a. Mission. Commanders monitor the implementation of the U.S. Army Aviation Standardization Program. They provide the command with a continuing assessment of the program.

b. Functions. Standardization committees will be organized to—

- (1) Recommend and review directives, provide guidance, and respond to specific inquiries and requests.
- (2) Coordinate requests for support from subordinate aviation units.
- (3) Prepare and review recommended changes to aviation standardization literature and forward to proponents.

(4) Conduct active assistance and evaluation programs.

(5) Meet at the call of the chairman.

(6) Funds for travel, per diem, and overtime, if required, will be provided by the member's parent organization.

c. Composition. Members will be designated in writing by the commander as follows:

(1) A chairman and secretary.

(2) Commander of subordinate aviation units.

(3) An aviation safety officer, aviation maintenance officer, flight surgeon, airplane SP, helicopter SP, IE, ME, SI and air traffic control (ATC) representative.

d. Correspondence. Standardization and training issues that require action by USAAVNC will be addressed to Commander, U.S. Army Aviation Center, ATTN: ATZQ-ES, Fort Rucker, AL 36362-5214.

#### **4-38. Installation and area aviation standardization committees**

a. Mission. Commanders supervise and coordinate the command implementation of the U.S. Army Aviation Standardization Program.

b. Functions. Standardization committees will be organized to—

(1) Enhance unit safety.

(2) Monitor the proficiency of all assigned or attached aviators in operational aviation positions and other crew members specified in ATMs.

(3) Coordinate requests for aviation standardization support from assigned or attached aviation units.

(4) Prepare and review recommended changes to aviation standardization literature and forward to proponents.

(5) Meet at the call of the chairman.

(6) Funds for travel, per diem, and overtime, if required, will be provided by the member's parent organization.

c. Composition. Members will be designated in writing by the commander as follows:

(1) A chairman and secretary.

(2) Commanders or chiefs of all aviation units or activities assigned or attached to the installation.

(3) An aviation safety officer, aviation maintenance officer, flight surgeon, airplane SP, helicopter SP, IE, ME, SI and ATC representative.

(4) Aviation officer or another designated individual from a subordinate installation that supports aviation flying activities.

#### **4-39. U.S. Army Aviation Center**

The USAAVNC is the proponent agency for the U.S. Army Aviation Standardization Program. In addition to the responsibilities listed in paragraph 1-4h, the USAAVNC will—

a. Act as reviewing agency for Army aviation training, standardization, and technical publications to ensure that they are standardized, accurate, and do not duplicate each other per AR 34-4 Army Standardization Policy. This is accomplished by the Director of Evaluation and Standardization (DES), (ATZQ-ESL), Fort Rucker, through continuous review and coordination with users and proponents and by developing normal and emergency procedures for aircraft operator's manuals.

b. In coordination with MACOMs, conduct active assistance and evaluation programs for aviation training. Frequency for the conduct of these programs is 18-24 months. This includes flight evaluations conducted by DES, (ATZQ-ES) Fort Rucker, to assess standardization and proficiency of aviators and aircrews throughout the Army as directed by HQDA.

c. Advise HQDA and MACOMs of the status of aviation flight standardization activities. DES will also provide information about implementing aviation standardization policies and procedures Army-wide.

d. Develop and recommend changes to general policy guidance for the U.S. Army Aviation Standardization Program.

## Chapter 5 Flight Procedures and Rules

### 5-1. General

a. Army personnel engaged in the operation of Army aircraft shall comply with applicable:

- (1) Federal aviation regulations, laws, and rules.
- (2) International Civil Aviation Organization (ICAO) regulations.
- (3) Host country regulations, laws, and rules.
- (4) Military regulations.
- (5) Non aviation federal and state laws applicable to Army aviation operations.

- (6) DOD flight information publications (FLIP).
- (7) Aircraft operator's manuals and checklists.

b. DOD FLIP does not provide procedure charts for all airfields that have instrument approach procedures. Required procedure charts may be added to the DOD FLIP by direct contact with the U.S. Army Aeronautical Service Agency (USAASA), 9325 Gunston Road, Suite N319, Fort Belvoir, VA 22060-5582, or the U.S. Army Aeronautical Services Detachment-Europe (USAASD-E). Use of commercial or host country products must be approved by either USAASA or an overseas USAASD as a supplement to DOD FLIP, per AR 95-2.

c. Smoking is prohibited in, or within 50 feet of, Army aircraft. d. Procedures for packaging, handling, and air transportation of dangerous materials are described in AR 95-27, TM 38-250, and AR 55-203. Aircrews assigned to move dangerous materials in Army aircraft will comply with the requirements listed in these publications.

e. Aircraft must be grounded during refueling, arming, oxygen servicing, and loading or unloading of flammable or explosive cargo. Aircraft will be grounded for maintenance per the appropriate maintenance publication.

### 5-2. Preflight

Before beginning a flight, the aircrew will acquaint themselves with mission, procedures, and rules.

a. *Planning.* The aviator will evaluate aircraft performance, departure, en route and approach data, notices to airmen (NOTAM), and appropriate FLIP or DOD publications per paragraph 5-1b.

b. *Fuel requirements.* At takeoff, aircraft must have enough fuel to reach the destination and alternate airport (if required) and have a planned fuel reserve of—

- (1) Rotary-wing.
  - (a) VFR - 20 minutes at cruise.
  - (b) IFR - 30 minutes at cruise.
- (2) Fixed-wing.
  - (a) VFR (day) - 30 minutes at cruise.
  - (b) VFR (night) - 45 minutes at cruise.
  - (c) IFR - 45 minutes at cruise.

c. *Flight weather planning.* Pilots will obtain departure, en route, destination, and alternate (if used) weather information before takeoff. The following weather requirements apply:

(1) *Flight into icing conditions.* Aircraft will not be flown into known or forecast severe icing conditions. If a flight is to be made into known or forecast moderate icing conditions, the aircraft must be equipped with adequate operational deicing or anti-icing equipment.

(2) *Flight into turbulence.* Aircraft will not be intentionally flown into known or forecast extreme turbulence or into known severe turbulence. Aircraft will not be intentionally flown into forecast severe turbulence unless MACOM commanders have established clearance procedures and—

- (a) Weather information is based on area forecasts.
- (b) Flights will be made in areas where encountering severe turbulence is unlikely.
  - (c) Flights are for essential training or essential missions only.
  - (d) Flight approval authorities are specified.
  - (e) Flights are terminated or depart turbulence if severe turbulence is encountered.

(3) *Flight into thunderstorms.* Aircraft will not be intentionally flown into thunderstorms.

(4) *VFR flight.* Destination weather must be forecast to be equal to or greater than VFR minimums at estimated time of arrival (ETA) through 1 hour after ETA. When there are intermittent weather conditions, predominant weather will apply. Aviators may file flight plans to a destination within Class B, C, D, and E surface area airspace when weather conditions are forecast to be equal to or greater than known special VFR minima for that airspace at ETA through 1 hour after ETA. Helicopter SVFR minima is 1/2 mile visibility and clear of cloud unless a higher minimum is required at the airfield. For airspace class, forecast en route weather must permit flight with separation from clouds and flight visibility equal to or greater than minimums stated in table 5-1.

(5) *Instrument flight rules (IFR) flight.* Destination weather must be forecast to be equal to or greater than the published weather planning minimum for the approach procedure to be flown at ETA through 1 hour after ETA. When there are intermittent weather conditions, predominant weather will apply. Aviators flying helicopters may reduce destination and alternate Category A visibility minimums by 50 percent, but not less than 1/4 mile or metric equivalent. Reduction of visibility for approaches labeled "copter only" is not authorized. Category II approach procedures may not be used in destination or alternate weather planning.

(6) *Area forecast.* If there is no weather reporting service, the aviator may use the area forecast.

(7) *Weather briefing.* Local commanders will establish policies specifying when DD Form 175-1 (Flight Weather Briefing) is required to be filed with DD Form 175 (Military Flight Plan). Weather information for the DD Form 175-1 will be obtained from a military weather facility. If a military forecaster is not available, the PC will obtain a weather forecast per DOD FLIP. Automated or computer based systems may be used to obtain weather information if the system is approved by USAASA and the commander establishes a program to ensure aviators are thoroughly familiar with the system in use. For all IFR and VFR cross country flights, the weather forecast will be void 1 hour and 30 minutes from the time the forecast is received provided the aircraft has not departed. Weather forecast may be extended after coordination with a weather facility. The crew should update weather briefing information on stopover flights.

d. *Flight plan.* Aircraft will not be flown unless a flight plan (military or civil) has been filed or an operation's log completed. When FAA Form 7233-1 (Flight Plan), DD Form 1801 (DOD International Flight Plan), or DD Form 175 are used, they will be filed per DOD FLIP. FAA Form 7233-1 can be obtained from the U.S. Army Aeronautical Service Agency (USAASA), 9325 Gunston Road, Suite N319, Fort Belvoir, VA 22060-5582. Local commanders will establish policies specifying the flight plan or operations log to be used.

(1) All Army aircraft that are instrumented for IFR flight and are flown by an instrument rated pilot will operate on IFR flight plans except when—

- (a) Flight is primarily for VFR training.
- (b) Time will not permit mission completion under IFR.
- (c) Mission can only be accomplished under VFR.
- (d) Excessive air traffic control (ATC) departure, en route, or terminal area delays are encountered.

- (e) Hazardous weather conditions must be avoided.
- (f) Requirements of paragraph 4-24b are not met.

(2) Stopover flight plans are subject to the following provisions:

- (a) No change will be made in the PC.
- (b) If the original manifest does not list passenger or crew changes at stopover points, changes will be filed with military installation base operations, FAA flight service, or other competent authority.

(3) After departing a nonmilitary airfield, the PC will advise flight service station (FSS) or other competent authority of the departure time.

(4) Locally produced operations logs may be used for local flights.

(5) A crew and passenger manifest is required for all flights. For tactical or tactical training flights the passenger manifest will be prepared and retained by the supported unit.

*e. Alternate airfield planning.* An alternate airfield is required when filing IFR to a destination under any of the following conditions:

(1) Radar is required to execute the approach procedure to be flown.

(2) The instrument approach navigational aids to be used are unmonitored.

(3) The predominant weather at the destination is forecast at ETA through 1 hour after ETA to be less than—

(a) Ceiling 400 feet above the weather planning minimum required for the approach to be flown.

(b) Visibility 1 mile (or metric equivalent) greater than the planning minimum required for the approach to be flown.

(4) An alternate is not required if descent from en route minimum altitude for IFR operation, approach, and landing can be made in VFR conditions.

*f. Alternate airfield selection.*

(1) An airfield may be selected as an alternate when the worst weather condition for that airfield is forecast for ETA through 1 hour after ETA to be equal to or greater than—

(a) Ceiling 400 feet above the weather planning minimum required for the approach to be flown and visibility 1 mile (or metric equivalent) greater than the weather planning minimum required for the approach to be flown; or

(b) VFR minimums and descent from en route minimum altitude for IFR operation, approach, and landing can be made in VFR conditions.

(2) An airfield will not be selected as an alternate except per f(1)(b) above—

(a) If the approach procedure to be used at the alternate is shown not authorized (NA) in FLIP.

(b) If radar is required for the approach procedure to be used at the alternate.

(c) If the instrument approach navigational aids to be used is unmonitored.

(d) If a Class B, C, D, or E surface area airspace does not exist or is not in effect at the airport to be used.

(e) If the global positioning system (GPS) is required for the approach.

*g. Equipment requirements.* Minimum equipment required for flight is shown in table 5-2. Minimum equipment and training requirements for category II instrument landing system (ILS) approaches are shown in table 5-3. Aircraft and GPS systems that have been certified for IFR flight per air worthiness release using GPS for approaches may execute these approaches under IFR conditions.

*h. Weight and balance.* The PC will ensure—

(1) The accuracy of computations on the DD Form 365-4 (Weight and Balance Clearance Form F-Transport/Tactical).

(2) That a completed DD Form 365-4 is aboard the aircraft to verify that the weight and center-of-gravity will remain within allowable limits for the entire flight. Several DD Forms 365-4 completed for other loadings also may be used to satisfy this requirement. In this case, the actual loading being verified must clearly be within the extremes of the loading shown on the DD Forms 365-4 used for verification.

### 5-3. Departure procedures

*a.* All aviators will comply with published nonstandard IFR takeoff minimums and departure procedures in flight information publications.

*b.* The aviator flying the aircraft on takeoff who has logged 50 hours, or more, of actual weather time as pilot-in-command has no

Army takeoff minimums. Instrument time flown in a simulator does not apply.

**Table 5-1**  
**Army VFR weather minimums**

Airspace Class	Flight Visibility Statute Miles	Distance from Cloud
A	N/A	N/A
B	3	Clear of Cloud
C&D	3	500 ft below 1,000 ft above 2,000 ft horizontal
E	3	500 ft below 1,000 ft above 2,000 ft horizontal
<< 10,000 MSL		
E at or >> 10,000 MSL	5	1,000 ft below 1,000 ft above 1 SM horizontal
G (Rotary Wing) 1,200 ft or less above surface (regardless of MSL).		
Day	1/2	Clear of cloud
Night	1	
>>1,200 ft above surface but <<10,000 ft MSL.		
Day	1	500 ft below
Night	3	1,000 ft above 2,000 ft horizontal
>>1,200 ft above surface and at or >>10,000 ft MSL		
Day & Night	5	1,000 ft below 1,000 ft above 1 SM horizontal
G (Fixed Wing)— <<10,000 ft MSL		
Day & Night	3	500 ft below 1,000 ft above 2,000 ft horizontal
>>10,000 ft MSL		
Day & Night	5	1,000 ft below 1,000 ft above 1 SM horizontal

**Table 5-2****Required equipment**

Required Equipment <sup>1</sup>	Day	Night	IMC <sup>2</sup>	NVD <sup>2</sup>
1. Heading Indicator		X	X	X
2. Attitude Indicator		X <sup>7</sup>	X	X
3. Turn & Slip Indicator			X <sup>4</sup>	
4. Airspeed Indicator	X	X	X	X
5. Pressure Altimeter	X	X	X	X
6. Vertical Speed Indicator <sup>4</sup>		X	X	X
7. Magnetic Compass	X	X	X	X
8. Fuel Quantity Indicator System	X	X	X	X
9. Clock /Watch W/Second	X	X	X	X
10. Free Air Temp	X	X	X	X
11. Pitot Heater			X	
12. Radar Altimeter(s) <sup>4</sup>		X <sup>5</sup>		X
13. AFCS/DASE		X <sup>5</sup>	X <sup>6</sup>	
14. Vertical Gyros and Indicators			X <sup>6</sup>	
15. AHARS/HARS/FCC <sup>4</sup>	X	X	X	X
16. Doppler (AH 64 Only)		X	X	X
17. Standby Flight Instruments (OH58D, AH64, RC 12K/N/P)	X	X	X	X
18. Commo Equipment	X	X	X	X
19. Nav Equipment			X <sup>8</sup>	
20. Transponder			X	
21. Anticollision Light(s)	X	X	X	X
22. Position/Instrument Light(s)		X		X
23. Landing/Search Light <sup>3</sup>		X		X
24. Flashlight		X		X

**Notes:**

<sup>1</sup> Equipment designated for flight in day, night, IMC, or NVD must be operational and is the minimum required without any regard for mission requirements.

<sup>2</sup> Items 1 through 6 must be operational at the pilot's station for fixed wing aircraft and operational at both pilot's and copilot's station in rotary wing aircraft where provisions exist. All vacuum and electrical sources for flight instruments must be operational.

<sup>3</sup> NVD IR light must be installed and operational for all NVD flights except FLIR aircraft. Failure of the light in flight must be evaluated to determine impact on mission and further NVD flight.

<sup>4</sup> If part of normal or installed aircraft equipment, it must be operational.

<sup>5</sup> Applies only to CH-47 operation on water. A visible horizon and two or more highly visible stationary objects for cues on the waters surface must be present at the landing site.

<sup>6</sup> Both AFCS and all components of either vertical gyro shall be operational for CH-47 and UH-60.

<sup>7</sup> Visible horizon may be substituted for attitude indicator.

<sup>8</sup> GPS navigation systems used for IFR must have a current non-corruptible database and comply with all FAA TSO C-129 (A-1) requirements.

c. The aviator flying the aircraft on takeoff who has not logged 50 hours of actual weather time has the following minimums:

(1) Airplanes—ceiling 200 feet and either visibility 1/2 mile, runway visual range (RVR) 2,400 or metric equivalent.

(2) Helicopters—ceiling 100 feet and either visibility 1/4 mile, RVR 1200 feet or metric equivalent

(3) RVR may be used when takeoff is made from the runway for which RVR is reported.

d. Special VFR flights within and departures from Class B, C, D, and E airspace are authorized provided the weather requirements of Far part 91 or applicable host country flight regulations are met and an appropriate ATC clearance is obtained. Army helicopter SVFR minima is one-half mile visibility and clear of cloud unless higher minimum is required at the airfield.

**5-4. En route procedures**

a. *Instrument meteorological conditions (IMC).* During IMC

flight, all instruments and communication equipment in the cockpit will be kept in the "on" position and immediately available for use.

b. *Over-the-top flights.* Aircraft will not be flown above a cloud or fog layer under VFR for more than 30 minutes unless—

(1) the aircraft is equipped for IMC flight per table 5-2 and not restricted from IMC flight.

(2) All instrument flight rules and requirements can be met for the remaining flight.

c. *Communications.*

(1) IFR. Reports and radio phraseology will conform to DOD FLIP.

(2) VFR. Aviators will monitor appropriate frequencies and make position reports as required.

d. *Holding.*

(1) An aviator may request ATC clearance to hold at any time if fuel and alternate requirements can be met.

(2) Holding will be in accordance with DOD FLIP.

e. *Overflying national security areas.* Aviators shall avoid overflight of national security areas below 2,000 feet above ground level (AGL). Exceptions will be per instructions in DOD FLIP.

**5-5. Arrival procedures**

a. *Approach.*

(1) Acceptance of charted visual approach clearance is not mandatory.

(2) When an instrument approach is necessary, an approved procedure will be flown. Approved procedures are published by the military services and FAA in DOD and NOS FLIPs.

(3) When published landing visibility minimums require conversion between RVR and miles or metric equivalent, the conversion table in DOD FLIP will be used. RVR is the controlling visibility factor when published and reported for a runway. RVR, however, will not be used with a circling approach.

(4) Dual VOR equipment requirements specified on approach charts do not apply to Army aircraft. Off-tuning from the approach aid to identify an approach fix is authorized. Dual VOR approach minimums apply.

(5) An approach may be initiated, regardless of ceiling and visibility.

(6) Category II ILS approaches in IMC are authorized only when all provisions of table 5-3 are met. Descent on category II ILS approaches is restricted to the highest decision height (DH) published for the procedure selected.

**Table 5-3**  
**Aircraft equipment requirements for Category II Approaches**

Minimum Equipment	Remarks
Single flight director with dual displays (1)	(1) Single axis authorized if basic glide slope information is displayed on same instrument.
and	
Single Automatic approach coupler (2)	( 2 ) Split axis authorized.
or	
Two independent flight director systems	
Instrument failure warning system	Flight crew must have assigned crew duties and procedures to provide immediate detection of essential instrument and equipment failures.
Radar altimeter or inner marker	
Attitude gyros with calibrated pitch markings	
or	
Flight director pitch command	
or	
Computed pitch command	
Auto throttle system	Required for all turbojets if operations based on dual flight directors and all aircraft using split axis couplers.
Rain removal system	Aviator Evaluation Requirements
Pilots in command and copilots will be evaluated by an instrument flight examiner on their ability to perform the maneuvers listed below at least annually for the specific aircraft being flown.	
Low Approach System	Maneuvers
1. Dual flight director	Two ILS approaches to 100 feet; one a landing will be accomplished and from the other a missed approach.
2. Flight director and approach coupler	Two ILS approaches to 100 feet; one using flight director and one using auto, coupling from one a landing will be accomplished and from the other a missed approach.

**Notes:**

<sup>1</sup> Either an aircraft or an approach visual simulator may be used. When accomplished in an aircraft, a hood will be used to simulate the weather. When accomplished in an approved visual simulator, the system must simulate the appropriate category of weather, ceiling and visibility, and be equipped with an appropriate lighting system that depicts the approach and runway lights.

<sup>2</sup> Copilots will demonstrate their ability to perform assigned copilot functions.

(7) Practice hooded approaches may be made to the decision height or minimum descent altitude when the aircraft has dual controls and a pilot or aerial observer is at one set of controls. In all other cases, hooded approaches may not be made lower than 500 feet AGL.

(8) Special VFR flights within Class B, C, D, and E airspace are authorized provided the weather requirements of FAR part 91 or applicable host country flight regulations are met and an appropriate ATC clearance is obtained. Army helicopter SVFR minima is one-half mile visibility and clear of cloud unless higher minimum is required at the airfield.

*b. Missed approach.* The published missed approach procedure or other procedures as directed by ATC will be flown. Additional approaches may be flown provided fuel, including reserve, is adequate. An ATC clearance must be requested and approved before proceeding to another airfield. A change of flight plan will be made per FLIP if time permits.

*c. Traffic patterns.*

(1) Large (above 12,500 lbs) and turbine powered airplanes will

be flown at 1,500 feet above the surface of the airport unless deviation required to maintain proper cloud clearance. Exceptions will be as prescribed in FLIP or as directed by ATC.

(2) Helicopter traffic patterns at Army heliports and airfields are normally flown at 700 feet AGL. At other airports, helicopters will avoid the flow of airplane traffic.

*d. Landing.* An aircraft will not be flown below the published MDA or an approach continued below the DH unless the following exist:

(1) The approach threshold of the runway, or the approach lights or other markings, identifiable with the approach end of the runway or landing area, must be clearly visible to the pilot.

(2) The aircraft must be in a position from which a safe approach to the runway or landing area can be made.

*e. Closing flight plans.* When the flight terminates, the PC will ensure the flight plan is closed as shown in DOD FLIP.

## Chapter 6

### Safety of Flight (SOF) messages and Aviation Safety Action Messages

#### 6-1. General

*a.* This chapter prescribes responsibilities and procedures for issuing safety-of-flight (SOF) messages, aviation safety action messages (ASAM) and preparing compliance reports. It also provides guidance for grounding and release from grounding of Army aircraft due to SOF messages.

*b.* Headquarters, Department of the Army, (HQDA), Office Chief of Staff Army, (OCSA) will approve Army-wide grounding or ungrounding of an entire mission design series (MDS) fleet of aircraft.

*c.* HQDA, DCSLOG, DALO-AV in coordination with HQDA staff elements will approve the release of SOF messages that ground or unground aircraft or the entire MDS fleet of aircraft.

*d.* SOF messages are defined as electrically transmitted messages pertaining to any defect or hazardous condition, actual or potential, that can cause personal injury, death, or damage to aircraft, components or repair parts where a medium to high risk safety condition has been determined per AR 385-16.

*e.* Aviation Safety Action Messages are defined as electrically transmitted messages which convey maintenance, technical or general interest information where a low to medium risk safety condition has been determined per AR 385-16. ASAMs are of a lower priority than SOF messages.

#### Section I

### Safety of Flight Messages

#### 6-2. Responsibilities

*a.* HQDA, DCSLOG, DALO-AV, will approve the release of SOF messages that ground aircraft, following coordination and approval by OCSA when grounding impacts entire MDS.

*b.* Upon discovery or notification of a high risk SOF condition, the Commander, Aviation and Missile Command (AMCOM) will—

(1) Immediately notify U.S. Army Safety Center (USASC), U.S. Army Aviation Center (USAAVNC), Program Executive Office - Aviation (SFAE-AV), Army Material Command (AMC) and DCSLOG by telephone when a known or potential emergency SOF condition exists.

(2) Prepare SOF message in the format shown in figure 6-1.

(3) After coordination with USASC, USAAVNC, AMC, SFAE- and DCSLOG, promptly dispatch a SOF message to MACOMs, NGB, activities, and foreign governments (through Army security assistance channels) when a known or potential hazardous condition exists.

(4) After 3 working days, retransmit SOF messages to MACOMs, NGB and activity points of contact who failed to verify to AMCOM the receipt and retransmission of SOF messages to subordinate commands.

(5) Prepare publication changes in accordance with AR 25-30, DA Pam 310-20, and AR 750-10.

(6) Issue all follow-up SOF messages to MACOMs, NGB, activities, and foreign governments.

(7) Provide information as to where required material and repair parts can be obtained, to include peripheral items. When practical, assemble kits for issue under a single national stock number.

(8) Coordinate issue and turn-in of items with appropriate national inventory control points or non-Army agencies.

c. MACOM, NGB, and activity commanders will—

(1) Within 24 hours, retransmit SOF messages to all subordinate units in accordance with AR 25-11. An information copy or separate message will be transmitted to AMCOM (ATTN: AMSAM-SF-A). To confirm retransmissions:

(a) Prepare reporting instructions to ensure prompt compliance with SOF message requirements.

(b) Monitor SOF message compliance with SOF message requirements.

(c) Resolve SOF message compliance problems.

(d) Submit reports as required by paragraph 6-7.

(2) For the NGB and those MACOMs and activities that combine message compliance reporting to AMCOM—

(a) Report compliance to AMCOM within 15 working days from the date of the SOF message or as directed. The reporting compliance suspense date requires reporting of aircraft after The Army Maintenance Management System (TAMMS) entries required by the SOF message have been completed per DA Pam 738-751. Reporting messages will be transmitted on a priority basis.

(b) Report to AMCOM any additional data requested in the SOF message within the suspense date established in the SOF message. The task or inspection suspense date will be required when AMCOM needs to address the data accumulated from the initial SOF task or inspection. Negative reports may be required. Reporting messages will be transmitted on a priority basis.

d. The users of Army aircraft and related equipment will report—

(1) Compliance per their MACOM, activity, or NGB's SOF operating instructions and directives within 15 working days from the date of the SOF message or as directed. The reporting compliance suspense date requires reporting of aircraft after TAMMS entries required by the SOF message have been completed per DA Pam 738-751. Reporting message will be transmitted on priority basis.

(2) Per their MACOM, activity, or NGB's SOF operating instructions and directives within the suspense date established in the SOF message, any additional data requested in the SOF message relative to the task or inspection initially required. This task/inspection reporting suspense date will be required when AMCOM needs to accumulate data from the SOF message task or inspection. Negative reports may be required. Reporting message will be transmitted on a priority basis.

(3) Deficiencies resulting from compliance with SOF messages per DA Pam 738-751.

e. Commanders of depot activities will—

(1) Acknowledge receipt of each SOF message by return priority message, identifying those aircraft by serial number that are physically in or awaiting depot maintenance at the depot.

(2) Estimate when SOF requirements will be accomplished for affected aircraft, components, and repair parts.

(3) Prior to release of aircraft from depot, confirm SOF compliance by aircraft serial number and reference the specific SOF message by date, time group, and subject per DA Pam 738-751.

f. MACOMs with wholesale, retail, theater reserves, war reserves or prepositioned material configured to unit sets (POMCUS) spares and repair parts will comply with SOF message requirements and provide reports via priority message as requested per SOF message.

g. When an unsafe or hazardous condition or practice is discovered in an aircraft, component, repair part, or technical publication, the responsible commander will—

(1) Immediately notify Commander, AMCOM, ATTN: AMSAM-SR-E, Redstone Arsenal, Huntsville, AL 35898; and Commander, USASC, ATTN: CSSC-SA, Fort Rucker, AL 36362-5000.

(2) Confirm notification to AMCOM and USASC by electrically transmitted message within 24 hours of discovery.

h. Follow-up the above notification in accordance with DA Pam 738-751 by using the procedures for category I quality deficiency report/equipment improvement recommendations.

### 6-3. Type of SOF messages

SOF messages are formatted in accordance with figure 6-1. Figure 6-1 contains specific instructions and explanations of each paragraph and subparagraph within the message. These messages may also authorize the immediate use of technical changes to publications announced in the message pending receipt of the DA authenticated change. The types of SOF messages are as follows:

a. Emergency. An emergency message immediately grounds a fleet of MDS aircraft or a designated portion of a fleet of aircraft. This occurs when a hazardous condition exists that has the potential to cause a catastrophic accident resulting in injury or death of personnel, damage, or destruction of aircraft. (These messages are for grounding purposes only. Emergency messages will always be followed by operational or technical message.)

b. Operational. An operational message may ground an aircraft for operational reasons, other than emergency, to correct hazardous conditions pertaining to aircraft operation. These may include flight procedures, operating limitations, or operational policy.

c. Technical. A technical message may be issued to effect grounding for material or maintenance conditions. This message can be an independent or a follow-up to an emergency SOF message. Required corrective action must be completed within the time frame or frequency established by the initial message or published in subsequent SOF messages or publications. Technical messages may include the following:

(1) Corrective action not involving a configuration change.

(2) Aircraft, component, or repair parts modification to be accomplished by an urgent MWO.

(3) One-time inspection requirements for aircraft, components, or repair parts to be accomplished by an urgent TB.

(4) Replacement of safety related items that require continuous monitoring.

### 6-4. Issuance of SOF messages

a. Prior to initial operating capability (IOC), aircraft flight safety will be the responsibility of the project manager or material developer. This will be assured through airworthiness releases issued per AR 70-62.

b. Effective upon date of IOC for the aircraft system, AMCOM will issue all SOF messages unless otherwise determined.

c. All SOF messages will be transmitted as immediate to action addresses and priority to informational addresses per AR 25-11.

d. The AMCOM will—

(1) Establish automatic digital network procedures for transmission of SOF messages.

(2) Issue SOF and follow-up messages to affected foreign governments (through Army security assistance channels), civilian contractors and federal agencies with Army aircraft on loan and lease, Navy and Air Force.

(3) Maintain reporting status and accounting records for all aircraft, components, and repair parts identified by the SOF message. Notify MACOMs, NGB or other activities of reporting deficiencies.

(4) Maintain a record of foreign governments that have obtained aircraft through security assistance programs.

e. SOF message content is shown in figure 6-1.

f. SOF compliance reporting message format is shown in figure 6-2.

### 6-5. Other notifications

AMCOM will coordinate the following through Army security assistance channels:

a. SOF messages grounding Army aircraft used by foreign governments.

b. Follow-up actions involving urgent MWO or TB applications.

## 6-6. Exception to provisions of SOF message

a. MACOM commanders may authorize temporary exception from SOF message requirements. Exceptions may only occur when combat operations or matter of life or death in civil disasters or other emergencies are so urgent that they override the consequences of continued aircraft operation.

b. The commander, AMCOM, is the approving authority for exceptions to SOF provisions on all SOF messages other than fleet-wide groundings.

## 6-7. Reporting

a. Outstanding SOF message requirements will be reported per the reporting section of the SOF message.

b. SOF messages that affect equipment not in the operator's possession will be accounted for and administratively closed by message using RCS CSGLD-1860(R1).

## 6-8. Release of grounded aircraft

a. When the initial SOF message grounds a fleet of aircraft and contains instructions that automatically release aircraft, components, or repair parts from grounding condition, subject items will be released from grounding only upon completion of all specified actions or upon exception issued by the Commander, AMCOM, following coordination with SFAE-AV, USASC, AMC, USAAVNC, and DALO-AV.

b. When the initial SOF message does not contain corrective actions or instructions releasing the aircraft from a grounding condition, AMCOM will issue appropriate follow-up instructions following coordination with SFAE-AV, USASC, AMC, USAAVNC and DALO-AV.

c. In the absence of instructions, the aircraft, components, and repair parts grounded by an SOF message will not be released from grounding except as stated in paragraph 6-8a above.

## 6-9. Information addressees

The following will be information addressees on all SOF messages issued by AMCOM:

- HQDA(DALO-AV)
- HQDA (DALO-SM)
- HQDA(DAMO-FDV)
- HQDA(DAMO-TRF)
- HQDA (DAMO-AOC)
- HQDA(DAIG-SD)
- HQDA(DASG-HC)
- HQDA(DAAR-OT)
- HQDA(DACS-SF)
- HQDA(DAAE-ZB/LO)
- HQDA(DAEN-ASZ-F)
- HQDA(SARD-SM/SC)
- Commander, AMC (AMCSF-A/AMCRE-AV/AMCDE-SA)
- Commander, USAAVNC, (ATZQ-DOL-AQ)
- Commander, USASC (CSSC-PMA)

## Section II

### Aviation Safety Action Messages

## 6-10. Responsibilities

a. The Commander, AMCOM will approve the release of ASAMs.

b. Upon discovery or notification of an ASAM condition, the AMCOM commander will—

(1) Prepare ASAM in the format shown in figure 6-3.

(2) After coordination with USASC, USAAVNC, AMC, SFAE-AV, and DCSLOG, promptly dispatch an ASAM to MACOMs, NGB, activities and foreign governments (through Army security assistance channels) when a known or potential hazardous condition exists.

(3) After 3 working days, retransmit ASAMs to MACOMs, NGB, and activity points of contact who failed to verify to AMCOM the receipt and retransmission of ASAMs to subordinate commands.

(4) Prepare publication changes in accordance with AR 25-30, DA Pam 310-20, and AR 750-10.

(5) Issue all follow-up ASAMs to MACOMs, NGB activities, and foreign governments.

(6) Provide information where required material and repair parts can be obtained, to include peripheral items. When practical, assemble kits for issue under a single national stock number.

(7) Coordinate issue and turn-in of items with appropriate national inventory control points or non-Army agencies.

c. MACOM, NGB, and activity commanders will—

(1) Within 24 hours, retransmit ASAMs to all subordinate units in accordance with AR 25-11. An information copy or separate message will be transmitted to AMCOM (AMSAM-C-XS). To confirm retransmissions:

(a) Prepare reporting instructions to ensure prompt compliance with ASAM, as required.

(b) Monitor ASAM compliance with ASAM requirements. Compliance will be required only if stated in the ASAM.

(c) Resolve ASAM compliance problems.

(d) Submit reports as required by paragraph 6-15.

(2) For the NGB and those MACOMs and activities that combine message compliance reporting to AMCOM—

(a) For ASAMs that require compliance reporting, report compliance to AMCOM within 15 working days of the date of the ASAM or as directed. The reporting compliance suspense date requires reporting of aircraft after TAMMS entries required by the ASAM have been compiled per DA Pam 738-751. Reporting messages will be transmitted on a priority basis.

(b) For ASAMs that require task/inspection reports, report to AMCOM any additional data requested in the ASAM within the suspense date established in the ASAM. The task/inspection suspense date will be required only when AMCOM needs to address the data accumulated from the initial ASAM task or inspection. Negative reports may be required. Reporting messages will be transmitted on a priority basis.

d. The users of Army aircraft and related equipment when required per ASAM will report—

(1) Compliance per their MACOM, activity, or NGB's ASAM operating instructions and directives within 15 working days of date of the ASAM or as directed. The reporting compliance suspense date requires reporting of aircraft after TAMMS entries required by the ASAM have been completed per DA Pam 738-751. Reporting messages will be transmitted on priority basis.

(2) Per their MACOM, activity, or NGB's ASAM operating instructions and directives within the suspense date established in the ASAM, any additional data requested in the ASAM relative to the task or inspection initially required. The task/inspection reporting suspense date will be required when AMCOM needs to accumulate data from the ASAM task or inspection. Negative reports may be required. Reporting message will be transmitted on a priority basis.

(3) Deficiencies resulting from compliance with ASAMs per DA Pam 738-751.

e. Commanders of depot activities when required per ASAM will—

(1) Acknowledge receipt of each ASAM by return priority message identifying those aircraft by serial number that are physically in or awaiting depot maintenance at the depot.

(2) Estimate when ASAM requirements will be accomplished for affected aircraft, components, and repair parts.

(3) Prior to release of aircraft from depot, confirm ASAM compliance by aircraft serial number and reference the specific ASAM by date, time group, and subject per DA Pam 738-751.

f. MACOMs with wholesale, retail, theater reserves, war reserves or POMCUS spares and repair parts will comply with ASAM requirements and provide reports via priority message as requested per ASAM.

g. When a safety, maintenance or operational condition or practice is discovered on an aircraft, component, repair part, or technical publication, the responsible commander will provide notification in accordance with DA Pam 738-751 using the procedures for deficiency reports.

#### **6-11. Types of aviation safety action messages**

ASAMs may direct, modify and clarify maintenance actions, update technical publications pending receipt of DA authenticated changes, or provide information to include aviation related equipment (for example, NVG, ALSE). A maintenance mandatory ASAM will not ground aircraft but may require accomplishment of a task and require report of completion of findings. ASAMs are formatted in accordance with figure 6-3. Figure 6-3 contains specific instructions and explanations of each paragraph and subparagraph within the message. The types of ASAMs are as follows:

- a. Maintenance mandatory. A maintenance mandatory ASAM directs maintenance actions and/or updates technical manuals and may also require compliance reporting and task/inspection reporting.
- b. Informational. An informational ASAM will provide status and information of a maintenance, technical, or general nature.
- c. Operational. An operational ASAM pertains to aircraft operation, flight procedures, limitations or operational policy.

#### **6-12. Issuance of ASAMs**

- a. Effective upon date of IOC for the aircraft system, AMCOM will issue all ASAMs unless otherwise determined.
- b. ASAMs will normally be transmitted as priority. Copies of transmitted ASAMs obtained by informal means such as electronic mail, facsimile, and so forth, are considered valid.
- c. The AMCOM will—
  - (1) Establish automatic digital network procedures for transmission of ASAMs.
  - (2) Issue ASAM and follow-up messages to affected foreign governments (through Army security assistance channels), civilian contractors and federal agencies with Army aircraft on loan and lease, Navy and Air Force.
  - (3) Maintain reporting status and accounting records for all aircraft, components, and repair parts identified by the ASAM. Notify MACOMs, NGB or other activities of reporting deficiencies.
  - (4) Maintain a record of foreign governments that have obtained aircraft through security assistance programs.
- d. ASAM compliance reporting message format is shown in figure 6-2.
- e. ASAM content is shown in figure 6-3.

#### **6-13. Other notifications**

AMCOM will coordinate ASAMs through Army security assistance channels affecting Army aircraft used by foreign governments.

#### **6-14. Exceptions to provisions of ASAMs**

- a. MACOM commanders may authorize temporary exemption from ASAM requirements. Exceptions may only occur when combat operations or matter of life or death in civil disasters or other emergencies are so urgent that they override the consequences of continued aircraft operation.
- b. The Commander, AMCOM, is the approving authority for exceptions to ASAM provisions on all ASAM other than fleet-wide groundings.

#### **6-15. Reporting**

- a. Outstanding ASAM requirements will be reported per the reporting section of the ASAM.
- b. ASAMs that affect equipment not in the operator's possession will be accounted for and administratively closed by message using RCS CSGLD-1860(R1).

#### **6-16. Information addressees**

The following will be information addressees on all ASAMs issued by AMCOM.

- HQDA(DALO-AV)
- HQDA (DALO-SML)
- HQDA(DAMO-FDV)
- HQDA(DAMO-TRF)
- HQDA (DAMO-AOC)
- HQDA(DAIG-SD)
- HQDA(DASG-HC)
- HQDA(DAAR-OT)
- HQDA(DACS-SF)
- HQDA(DAAE-ZB/LO)
- HQDA(DAEN-ASZ-F)
- HQDA(SARD-SM/SC)
- Commander, AMC (AMCSF-A/AMCRE-AV/AMCDE-SA)
- Commander, USAAVNC, (ATZQ-DOL-AQ)
- Commander, USASC (CSSC-PMA)

---

CDR AMCOM Huntsville, AL//AMSAM-C-XS//  
AIG 8881  
(APPLICABLE AIGS)  
(FEDERAL AGENCIES)  
(CIVILIAN AGENCIES)  
NFO (MAAGS/MISSIONS/MILGROUPS)

UNCLAS

SUBJECT: THE SUBJECT OF THE MESSAGE SHALL BE "SAFETY OF FLIGHT MESSAGE," FOLLOWED BY ONE OF THE FOLLOWING WORDS: "EMERGENCY," "OPERATIONAL," OR "TECHNICAL" THEN "RCS CSGLD-1860(R1)." FOR TECHNICAL MESSAGES, THE APPROPRIATE TECHNICAL PUBLICATION, E.G., "TB, MWO" WILL BE ENTERED. TBS WILL NORMALLY SUPERSEDE THE MESSAGE AND CONTAIN AN EXPIRATION DATE. SUBJECT OF EACH SOF MESSAGE WILL INCLUDE AN IDENTIFICATION OF AIRCRAFT BY MISSION-DESIGN-SERIES (MDS) OR NATIONAL STOCK NUMBER IN THE CASE OF COMPONENTS AND REPAIR PARTS. ALSO, EACH SOF MESSAGE WILL HAVE A UNIQUE MESSAGE CONTROL NUMBER WHICH INCLUDES MDS AND FISCAL YEAR, IN CHRONOLOGICAL SEQUENCE, E.G., UH-1-94-03 WOULD BE THE THIRD UH-1 SOF MESSAGE OF FY 94. AMSAM-C-XS (DSN 693-2258/2085, COMMERCIAL 314/263-2258/2085) IS THE CONTROL POINT FOR ISSUING/CONTROLLING SOF CONTROL NUMBERS. FOLLOW UP SOF MESSAGE WILL CONTAIN SUCH ADDITIONAL TECHNICAL INFORMATION AS NECESSARY TO ACCOMPLISH CORRECTIVE ACTION AND STATUS ACCOUNTING, AND WILL REFERENCE THE DATE/TIME/GROUP OF THE INITIAL MESSAGE. SUSPENSE: (SPECIFIC INSTRUCTIONS ARE CONTAINED IN PARAGRAPH 14 OF THIS FIGURE)

NOTE: THIS IS A SAFETY OF FLIGHT MESSAGE AND HAS NOT BEEN TRANSMITTED TO UNITS SUBORDINATE TO ADDRESSEES. ADDRESSEES SHOULD IMMEDIATELY RETRANSMIT THIS MESSAGE TO ALL SUBORDINATE UNITS, ACTIVITIES OR ELEMENTS AFFECTED OR CONCERNED. THE RETRANSMITTAL SHALL REFERENCE THE MESSAGE. ACTION ADDRESSES WILL IMMEDIATELY VERIFY THIS TRANSMISSION TO COMMANDER, AMCOM, ATTN: AMSAM-SF-A (SOF COMPLIANCE OFFICER).

1. PRIORITY CLASSIFICATION: UPON RECEIPT STATUS SYMBOL WILL BE CHANGED TO A CIRCLED RED //X// UNTIL TASK/INSPECTION IS COMPLETED. THIS PARAGRAPH CONTAINS THE PERTINENT CLASSIFICATION WITH THE FOLLOWING NOTE AND SUBPARAGRAPHS AS APPLICABLE -- NOTE -- SEE AR 95-1,<sup>\*\*\*</sup> PARA 6-6 FOR NONCOMPLIANCE AUTHORITY OF MAJOR COMMANDERS.

- A. AIRCRAFT IN USE.
- B. AIRCRAFT IN DEPOT STOCK.
- C. AIRCRAFT UNDERGOING MAINTENANCE.
- D. AIRCRAFT IN TRANSIT.
- E. MAINTENANCE TRAINERS (CATEGORY A, B AND C).
- F. COMPONENTS IN STOCK AT ALL LEVELS.

2. TASK/INSPECTION SUSPENSE DATE (IF APPLICABLE): DATE TASK/INSPECTION MUST BE PERFORMED BEFORE STATUS SYMBOL OF AIRCRAFT IS UPGRADED TO RED //X//.

3. REPORTING COMPLIANCE SUSPENSE DATE: DATE A SOF COMPLIANCE REPORT MUST BE FORWARDED TO AMCOM IAW FIGURE 6-2.

4. SUMMARY OF PROBLEM: PARAGRAPH CONTAINS A BRIEF SUMMARY OF THE PROBLEM AND STATES PURPOSE(S) OF THE MESSAGE. THIS PARAGRAPH WILL INCLUDE THE ESTIMATED READINESS IMPACT, IF APPLICABLE.

5. END ITEMS TO BE INSPECTED: A LISTING OF ALL END ITEMS OR SYSTEMS TO BE INSPECTED WILL BE INSERTED HERE. THIS LIST WILL INCLUDE THE NOMENCLATURES, TYPE AND MODELS AND SERIAL NUMBERS OR SERIAL NUMBER RANGES OF THE END ITEMS OR SYSTEMS TO BE INSPECTED.

6. ASSEMBLY COMPONENTS TO BE INSPECTED: A LISTING OF ALL ASSEMBLIES OR COMPONENTS TO BE INSPECTED WILL BE INSERTED HERE. THIS LIST WILL INCLUDE THE NOMENCLATURE, NSN, PART NUMBERS AND ANY OTHER APPLICABLE IDENTIFIERS OF THE ASSEMBLIES OR COMPONENTS TO BE INSPECTED.

---

Figure 6-1. Safety of flight message content—Continued

---

7. PARTS TO BE INSPECTED: A LISTING OF ALL PARTS TO BE INSPECTED WILL BE INSERTED HERE. THIS LIST WILL INCLUDE THE NOMENCLATURES, NSN, PART NUMBERS OR ANY OTHER APPLICABLE IDENTIFIERS OF THE PARTS TO BE INSPECTED.
8. INSPECTION PROCEDURES: THIS PARAGRAPH WILL CONTAIN DETAILED NARRATIVE PROCEDURES FOR ACCOMPLISHMENT OF THE TASK/INSPECTION.
9. CORRECTION PROCEDURES: THIS PARAGRAPH WILL CONTAIN DETAILED, STEP-BY-STEP INSTRUCTIONS FOR ACCOMPLISHING THE CORRECTION. THE INSTRUCTIONS WILL BE GIVEN IN SEQUENCE IN WHICH THE WORK IS MOST LOGICALLY PERFORMED.
10. SUPPLY/PARTS AND DISPOSITION: THIS PARAGRAPH WILL CONTAIN THE FOLLOWING SUBPARAGRAPHS AS APPLICABLE.
- A. PARTS REQUIRED: THIS SUBPARAGRAPH WILL CONTAIN A LIST OF PARTS REQUIRED TO ACCOMPLISH THE TASK/INSPECTION.
  - B. REQUISITIONING INSTRUCTIONS: THESE INSTRUCTIONS WILL BE FURNISHED TO ASSURE PROPER REQUISITIONING PROCEDURES ARE FOLLOWED AND MAY INCLUDE PROJECT CODES.
  - C. BULK AND CONSUMABLE MATERIALS: A TABULAR LISTING OF ALL BULK AND CONSUMABLE MATERIALS NEEDED WILL BE FURNISHED.
  - D. DISPOSITION: THERE WILL BE COMPLETE INSTRUCTIONS COVERING THE DISPOSITION OF THOSE PARTS/COMPONENTS BY NSN, WHICH ARE REPLACED OR REMOVED AS A RESULT OF THIS INSPECTION/CORRECTION.
  - E. DISPOSITION OF HAZARDOUS MATERIAL: WHEN APPROPRIATE, INCLUDE DEFENSE PROPERTY DISPOSAL AGENCY INSTRUCTIONS ALONG WITH APPROPRIATE WARNING NOTICES INDICATING ALL DANGERS TO PUBLIC HEALTH OR SAFETY. ALSO, STATE APPROPRIATE ACTIONS TO BE TAKEN. SPECIFIC INSTRUCTIONS FOR RENDERING INNOCUOUS AIRCRAFT REPAIR PARTS, COMPONENTS OR ACCESSORIES CONTAINING SUBSTANCES IDENTIFIED AS HAZARDOUS TO PUBLIC HEALTH OR SAFETY WILL BE INCLUDED AS APPROPRIATE.
11. SPECIAL TOOLS, JIGS AND FIXTURES REQUIRED: THIS PARAGRAPH WILL CONTAIN A LIST, PREPARED BY NOMENCLATURE, NSN, PART NUMBER OR REFERENCE NUMBER AND QUANTITIES (AS APPLICABLE) OF ALL SPECIAL TOOLS, JIGS AND FIXTURES REQUIRED TO ACCOMPLISH THE TASK/INSPECTION AND SUPPORT EQUIPMENT AFTER TASK/INSPECTION.
12. APPLICATION. THIS PARAGRAPH WILL CONTAIN THE FOLLOWING SUBORDINATE PARAGRAPHS:
- A. CATEGORY OF MAINTENANCE: THE LEVEL(S) OF MAINTENANCE CATEGORY AUTHORIZED TO PERFORM THE TASK/INSPECTION WILL BE INDICATED.
  - B. ESTIMATED TIME REQUIRED: THIS SUBPARAGRAPH WILL INDICATE THE ESTIMATED TIME FOR COMPLETION OF TASK/INSPECTION OF ONE END ITEM.
  - C. ESTIMATED COST IMPACT OF STOCK FUND ITEMS: THIS PARAGRAPH MAY INCLUDE NOMENCLATURE, PART NO./NSN, QUANTITY, COST EA., TOTAL COST, AND TOTAL COST PER AIRCRAFT.
  - D. TB/MWOs TO BE APPLIED PRIOR TO OR CONCURRENTLY WITH THIS INSPECTION: ALL TB/MWOs WHICH MUST BE COMPLETED PRIOR TO OR CONCURRENTLY WITH THE TASK/INSPECTION BEING DESCRIBED WILL BE LISTED.
  - E. PUBLICATIONS WHICH REQUIRE CHANGE AS A RESULT OF THIS INSPECTION: THIS SUBPARAGRAPH WILL LIST, BY PUBLICATION NUMBER AND DATE AND CHANGE NUMBER, ALL PUBLICATIONS (INCLUDING RPSTL, DMWR, etc.) WHICH HAVE BEEN CHANGED AS A RESULT OF THIS TASK/INSPECTION.
13. REFERENCES: APPLICABLE REFERENCES AS NEEDED.
14. RECORDING AND REPORTING REQUIREMENTS: THE "REPORTING COMPLIANCE SUSPENSE DATE" AND THE "TASK/INSPECTION REPORTING SUSPENSE DATE" (IF REQUIRED) ARE DETAILED IN THIS SECTION.
- A. REPORTING COMPLIANCE SUSPENSE DATE (AIRCRAFT): THIS SUBPARAGRAPH WILL GIVE INSTRUCTIONS AND THE MEANS IN WHICH TO FILE A COMPLIANCE REPORT UPON ENTERING SUBJECT TASK/INSPECTION ON DA FORM 2408-13.
  - B. TASK/INSPECTION REPORTING SUSPENSE DATE (AIRCRAFT): THIS SUBPARAGRAPH, IF REQUIRED, WILL CONTAIN DETAILED INSTRUCTIONS FOR REPORTING THE DATA RESULTING FROM THE REQUIRED TASK/INSPECTION. (NEGATIVE REPORTING MAY BE REQUIRED TO TRACK, E.G., RESULTS, APPLICATION, CONFIGURATION.)
  - C. REPORTING COMPLIANCE SUSPENSE DATE (SPARES): THIS SUBPARAGRAPH ADDRESSES WHOLESALE, RETAIL, THEATER RESERVES, WAR RESERVE AND POMCUS ORGANIZATIONS HOLDING ADDRESSED ASSETS TO CONFIRM MESSAGE RECEIPT.
  - D. TASK/INSPECTION REPORTING SUSPENSE DATE (SPARES): THIS SUBPARAGRAPH IF

Figure 6-1. Safety of flight message content—Continued

REQUIRED WILL CONTAIN DETAILED INSTRUCTIONS FOR WHOLESALE, RETAIL, THEATER RESERVES, WAR RESERVE AND POMCUS ORGANIZATIONS FOR REPORTING THE DATA RESULTING FROM THE APPLICATION OF TASK/INSPECTION. (NEGATIVE REPORTING MAY BE REQUIRED TO TRACK, E.G., RESULTS, APPLICATION, CONFIGURATION).

E. APPLICABLE FORMS: THIS SUBPARAGRAPH WILL CONTAIN A COMPLETE LISTING OF ALL TAMMS FORMS NEEDED FOR RECORDING THE REQUIRED TASK/INSPECTION.

15. WEIGHT AND BALANCE: RECORD ANY CHANGES TO WEIGHT AND BALANCE DATA.

16. POINTS OF CONTACT: THIS PARAGRAPH WILL USE THE FOLLOWING SUBPARAGRAPHS TO LIST THE POINTS OF CONTACT FOR ADDITIONAL INFORMATION.

- A. FORMS OR RECORDS POINT OF CONTACT.
- B. LOGISTICS POINT OF CONTACT.
- C. TECHNICAL POINT OF CONTACT.
- D. SAFETY POINT OF CONTACT
- E. AMCOM COMMAND OPERATIONS CENTER (COC)

Figure 6-1. Safety of flight message content

---

CDR 4TH INF DIV (MECH) FT CARSON CO //AFZC-AB-AMMS//  
CDR AMCOM HUNTSVILLE, AL//AMSAM-C-XS//  
INFO CDR FORSCOM FT MCPHERSON GA //FCJ3-OCF//

UNCLAS  
ATTN: SOF/ASAM COMPLIANCE OFFICER  
SUBJ: SOF/ASAM COMPLIANCE REPORT A. SOF UH-1-91-01 OR UH-1-91-ASAM-01,  
1. THIS IS TO CONFIRM RECEIPT AND COMPLIANCE OF REFERENCED MESSAGE. AS OF 01 MAR 91, ALL NECESSARY TAMMS ENTRIES HAVE BEEN ACCOMPLISHED FOR THE FOLLOWING AIRCRAFT LISTED IN NUMERICAL ORDER:

UH1H	UH-1V	EH-1E
64-13819	66-15711	69-15257
68-15731	67-16724	70-15624
69-15054		
0-15927		

2. POINT OF CONTACT IS SFC JOHN BROWN, DSN 789-1234 OR COMMERCIAL (123) 123-4567.

Figure 6-2. SOF and ASAM compliance reporting example

---

CDR AMCOM Huntsville, AL//AMSAM-C-XS//  
AIG 6713  
(APPLICABLE AIGS)  
(FEDERAL AGENCIES)  
(CIVILIAN AGENCIES)  
INFO (MAAGS/MISSIONS/MILGROUPS)UNCLAS

SUBJECT: THE SUBJECT OF THE MESSAGE SHALL BE "AVIATION SAFETY ACTION MESSAGE," FOLLOWED BY ONE OF THE FOLLOWING WORDS: "MAINTENANCE MANDATORY," "INFORMATIONAL" OR "OPERATIONAL." THEN "RCS CSGD-1860(R1)," IF REQUIRED. FOR MAINTENANCE MANDATORY MESSAGES, THE APPROPRIATE TECHNICAL PUBLICATION, (EG., TB, MWO) WILL BE ENTERED. TBs NORMALLY SUPERSEDE THE MESSAGE AND CONTAIN AN EXPIRATION DATE. SUBJECT OF EACH ASAM WILL INCLUDE AN IDENTIFICATION OF AIRCRAFT BY MISSION-DESIGN-SERIES (MDS) OR NATIONAL STOCK NUMBER IN THE CASE OF COMPONENTS AND REPAIR PARTS. ALSO, EACH ASAM WILL HAVE A UNIQUE MESSAGE CONTROL NUMBER WHICH INCLUDES MDS AND FISCAL YEAR, IN CHRONOLOGICAL SEQUENCE, E.G., UH-1-94-ASAM-03 WOULD BE THE THIRD UH-1 ASAM OF FY 94. AMSAM-C-XS (DSN 693-2258/2085, COMMERCIAL 314/263-2258/2085) IS THE CONTROL POINT FOR ISSUING/CONTROLLING ASAM CONTROL NUMBERS. FOLLOW UP ASAMS WILL CONTAIN SUCH ADDITIONAL TECHNICAL INFORMATION AS NECESSARY TO ACCOMPLISH CORRECTIVE ACTION AND STATUS ACCOUNTING, AND WILL REFERENCE THE DATE/TIME/GROUP OF THE INITIAL MESSAGE. SUSPENSE: (SPECIFIC INSTRUCTIONS ARE CONTAINED IN PARAGRAPH 14 OF THIS FIGURE)NOTE: THIS MESSAGE IS NOT A SAFETY OF FLIGHT MESSAGE. THIS IS AN AVIATION SAFETY ACTION MESSAGE AND HAS NOT BEEN TRANSMITTED TO UNITS SUBORDINATE TO ADDRESSEES. ADDRESSEES SHOULD IMMEDIATELY RETRANSMIT THIS MESSAGE TO ALL SUBORDINATE UNITS, ACTIVITIES OR ELEMENTS AFFECTED OR CONCERNED. THE RETRANSMITTAL SHALL REFERENCE THE MESSAGE.

1. PRIORITY CLASSIFICATION: (IF REQUIRED). UPON RECEIPT STATUS SYMBOL MAY BE CHANGED TO A RED HORIZONTAL DASH //--// UNTIL TASK/INSPECTION IS COMPLETED. THIS PARAGRAPH CONTAINS THE PERTINENT CLASSIFICATION WITH THE FOLLOWING NOTE AND SUBPARAGRAPHS AS APPLICABLE--

- A. AIRCRAFT IN USE.
- B. AIRCRAFT IN DEPOT STOCK.
- C. AIRCRAFT UNDERGOING MAINTENANCE.
- D. AIRCRAFT IN TRANSIT.
- E. MAINTENANCE TRAINERS (CATEGORY A, B AND C).
- F. COMPONENTS IN STOCK AT ALL LEVELS.

2. TASK/INSPECTION SUSPENSE DATE (IF APPLICABLE): DATE TASK/INSPECTION MUST BE PERFORMED BEFORE STATUS SYMBOL OF AIRCRAFT IS UPGRADED TO RED //X//. IF NOT APPLICABLE, ASAM WILL STATE: N/A.

3. REPORTING COMPLIANCE SUSPENSE DATE: DATE ASAM COMPLIANCE REPORT MUST BE FORWARDED TO AMCOM IAW FIGURE 6-2. IF NOT APPLICABLE, ASAM WILL STATE: N/A.

4. SUMMARY OF PROBLEM: PARAGRAPH CONTAINS A BRIEF SUMMARY OF THE PROBLEM AND STATES PURPOSE(S) OF THE MESSAGE.

5. END ITEMS TO BE INSPECTED: A LISTING OF ALL END ITEMS OR SYSTEMS TO BE INSPECTED WILL BE INSERTED HERE, IF APPLICABLE. THIS LIST WILL INCLUDE THE NOMENCLATURES, TYPE AND MODELS AND SERIAL NUMBERS OR SERIAL NUMBER RANGES OF THE END ITEMS OR SYSTEMS TO BE INSPECTED.

6. ASSEMBLY COMPONENTS TO BE INSPECTED: A LISTING OF ALL ASSEMBLIES OR COMPONENTS TO BE INSPECTED WILL BE INSERTED HERE, IF APPLICABLE. THIS LIST WILL INCLUDE THE NOMENCLATURE, NSN, PART NUMBERS AND ANY OTHER APPLICABLE IDENTIFIERS OF THE ASSEMBLIES OR COMPONENTS TO BE INSPECTED.

7. PARTS TO BE INSPECTED: A LISTING OF ALL PARTS TO BE INSPECTED WILL BE INSERTED HERE, IF APPLICABLE. THIS LIST WILL INCLUDE THE NOMENCLATURES, NSN, PART NUMBERS OR ANY OTHER APPLICABLE IDENTIFIERS OF THE PARTS TO BE INSPECTED.

8. INSPECTION PROCEDURES: THIS PARAGRAPH WILL CONTAIN DETAILED NARRATIVE PROCEDURES FOR ACCOMPLISHMENT OF THE TASK/INSPECTION, IF APPLICABLE.

9. CORRECTION PROCEDURES: THIS PARAGRAPH WILL CONTAIN DETAILED, STEP-BY-STEP

---

Figure 6-3. Aviation safety action message—Continued

---

INSTRUCTIONS FOR ACCOMPLISHING THE CORRECTION, IF APPLICABLE. THE INSTRUCTIONS WILL BE GIVEN IN SEQUENCE IN WHICH THE WORK IS MOST LOGICALLY PERFORMED.

10. SUPPLY/PARTS AND DISPOSITION: THIS PARAGRAPH WILL CONTAIN THE FOLLOWING SUBPARAGRAPHS AS APPLICABLE.

A. PARTS REQUIRED: THIS SUBPARAGRAPH WILL CONTAIN A LIST OF PARTS REQUIRED TO ACCOMPLISH THE TASK/INSPECTION.

B. REQUISITIONING INSTRUCTIONS: THESE INSTRUCTIONS WILL BE FURNISHED TO ASSURE PROPER REQUISITIONING PROCEDURES ARE FOLLOWED AND MAY INCLUDE PROJECT CODES.

C. BULK AND CONSUMABLE MATERIALS: A TABULAR LISTING OF ALL BULK AND CONSUMABLE MATERIALS NEEDED WILL BE FURNISHED.

D. DISPOSITION: THERE WILL BE COMPLETE INSTRUCTIONS COVERING THE DISPOSITION OF THOSE PARTS/COMPONENTS BY NSN, WHICH ARE REPLACED OR REMOVED AS A RESULT OF THIS INSPECTION/CORRECTION.

E. DISPOSITION OF HAZARDOUS MATERIAL: WHEN APPROPRIATE, INCLUDE DEFENSE PROPERTY DISPOSAL AGENCY INSTRUCTIONS ALONG WITH APPROPRIATE WARNING NOTICES INDICATING ALL DANGERS TO PUBLIC HEALTH OR SAFETY. ALSO, STATE APPROPRIATE ACTIONS TO BE TAKEN. SPECIFIC INSTRUCTIONS FOR RENDERING INNOCUOUS AIRCRAFT REPAIR PARTS, COMPONENTS OR ACCESSORIES CONTAINING SUBSTANCES IDENTIFIED AS HAZARDOUS TO PUBLIC HEALTH OR SAFETY WILL BE INCLUDED AS APPROPRIATE.

11. SPECIAL TOOLS, JIGS AND FIXTURES REQUIRED: THIS PARAGRAPH WILL CONTAIN A LIST, PREPARED BY NOMENCLATURE, NSN, PART NUMBER OR REFERENCE NUMBER AND QUANTITIES (AS APPLICABLE) OF ALL SPECIAL TOOLS, JIGS AND FIXTURES REQUIRED TO ACCOMPLISH THE TASK/INSPECTION AND SUPPORT EQUIPMENT AFTER TASK/INSPECTION.

12. APPLICATION. THIS PARAGRAPH WILL CONTAIN THE FOLLOWING SUBORDINATE PARAGRAPHS:

A. CATEGORY OF MAINTENANCE: THE LEVEL(S) OF MAINTENANCE CATEGORY AUTHORIZED TO PERFORM THE TASK/INSPECTION WILL BE INDICATED, IF APPLICABLE.

B. ESTIMATED TIME REQUIRED: THIS SUBPARAGRAPH WILL INDICATE THE ESTIMATED TIME FOR COMPLETION OF TASK/INSPECTION OF ONE END ITEM, IF APPLICABLE.

C. ESTIMATED COST IMPACT OF STOCK FUND ITEMS: THIS PARAGRAPH MAY INCLUDE NOMENCLATURE, PART NO./NSN, QUANTITY, COST EA., TOTAL COST, AND TOTAL COST PER AIRCRAFT, IF APPLICABLE.

D. TB/MWO'S TO BE APPLIED PRIOR TO OR CONCURRENTLY WITH THIS INSPECTION: ALL TB/MWO'S WHICH MUST BE COMPLETED PRIOR TO OR CONCURRENTLY WITH THE TASK/INSPECTION BEING DESCRIBED WILL BE LISTED.

E. PUBLICATIONS WHICH REQUIRE CHANGE AS A RESULT OF THIS INSPECTION: THIS SUBPARAGRAPH WILL LIST, BY PUBLICATION NUMBER AND DATE AND CHANGE NUMBER, ALL PUBLICATIONS (INCLUDING RPSTL, DMWR, ETC.) WHICH HAVE BEEN CHANGED AS A RESULT OF THIS TASK/INSPECTION, IF APPLICABLE.

13. REFERENCES: APPLICABLE REFERENCES AS NEEDED.

14. RECORDING AND REPORTING REQUIREMENTS: THE "REPORTING COMPLIANCE SUSPENSE DATE" AND THE "TASK/INSPECTION REPORTING SUSPENSE DATE" (IF REQUIRED) ARE DETAILED IN THIS SECTION.

A. REPORTING COMPLIANCE SUSPENSE DATE (AIRCRAFT): THIS SUBPARAGRAPH WILL GIVE INSTRUCTIONS AND THE MEANS IN WHICH TO FILE A COMPLIANCE REPORT UPON ENTERING SUBJECT TASK/INSPECTION ON DA FORM 2408-13. IF NOT APPLICABLE ASAM WILL STATE: N/A.

B. TASK/INSPECTION REPORTING SUSPENSE DATE (AIRCRAFT): THIS SUBPARAGRAPH, IF REQUIRED, WILL CONTAIN DETAILED INSTRUCTIONS FOR REPORTING THE DATA RESULTING FROM THE REQUIRED TASK/INSPECTION. (NEGATIVE REPORTING MAY BE REQUIRED TO TRACK, E.G., RESULTS, APPLICATION, CONFIGURATION.)

C. REPORTING COMPLIANCE SUSPENSE DATE (SPARES): THIS SUBPARAGRAPH ADDRESSES WHOLESALE, RETAIL, THEATER RESERVES, WAR RESERVE AND POMCUS ORGANIZATIONS HOLDING ADDRESSED ASSETS TO CONFIRM MESSAGE RECEIPT.

D. TASK/INSPECTION REPORTING SUSPENSE DATE (SPARES): THIS SUBPARAGRAPH IF REQUIRED WILL CONTAIN DETAILED INSTRUCTIONS FOR WHOLESALE, RETAIL, THEATER RESERVES, WAR RESERVE AND POMCUS ORGANIZATIONS FOR REPORTING THE DATA RESULTING FROM THE APPLICATION OF TASK/INSPECTION. (NEGATIVE REPORTING MAY BE REQUIRED TO TRACK, E.G., RESULTS, APPLICATION, CONFIGURATION.)

E. APPLICABLE FORMS: THIS SUBPARAGRAPH WILL CONTAIN A COMPLETE LISTING OF

Figure 6-3. Aviation safety action message—Continued

ALL TAMMS FORMS NEEDED FOR RECORDING THE REQUIRED TASK/INSPECTION, IF APPLICABLE.

15. WEIGHT AND BALANCE: RECORD ANY CHANGES TO WEIGHT AND BALANCE DATA.

16. POINTS OF CONTACT: THIS PARAGRAPH WILL USE THE FOLLOWING SUBPARAGRAPHS TO LIST THE POINTS OF CONTACT FOR ADDITIONAL INFORMATION.

- A. FORMS OR RECORDS POINT OF CONTACT.
- B. LOGISTICS POINT OF CONTACT.
- C. TECHNICAL POINT OF CONTACT.
- D. SAFETY POINT OF CONTACT.
- E. AMCOM COMMAND OPERATIONS CENTER (COC).

Figure 6-3. Aviation safety action message

## Chapter 7 Weight and Balance

### 7-1. General

This chapter provides a weight and balance control system for operation of Army aircraft.

a. The CG, AMC supervises the direction of overall command activities involving aviation weight and balance.

b. The CG, TRADOC will monitor the overall training of aviation weight and balance (para 1-4m). The CG, TRADOC will—

(1) Train operational unit weight and balance technicians in the following procedures:

- (a) Weighing aircraft.
- (b) Computing weight and balance.
- (c) Maintaining weight and balance records for Army aircraft.

(2) Train Army aviators and flight engineers in computing weight and balance.

(3) Train personnel to provide weight and balance services at support maintenance facilities.

c. The CG, AMCOM, is the technical proponent for all U.S. Army aviation weight and balance. The CG, AMCOM, will—

(1) Establish aviation weight and balance requirements and procedures in coordination with other Army agencies.

(2) Assist HQDA and AMC in the development of aviation weight and balance policy.

(3) Prepare and make technical data available on weight and balance.

(4) Procure and deliver weight and balance data for Army aircraft.

(5) Make engineering services available to assist service activities in solving weight and balance problems.

d. Commanders of installations and units that operate, maintain, repair, or modify Army aircraft will—

(1) Ensure effective application of these policies and procedures.

(2) Develop command directives to implement these policies and procedures.

(3) Appoint in writing, weight and balance technicians.

e. Pilots-in-command responsibilities for weight and balance are described in chapter 5, paragraph 5-2 h.

### 7-2. Weight and balance technicians

a. To qualify as a weight and balance technician, an individual must satisfactorily complete the 67 or 68 series career management field (CMF) Basic Non-Commissioned Officer Course (BNCOC) or comparable weight and balance course approved by TRADOC.

b. If a weight and balance technician trained in accordance with paragraph a. above is not available in the unit, commanders may delegate the task.

c. Weight and balance technicians will—

(1) Prepare and maintain up-to-date and accurate individual aircraft weight and balance files as described in paragraph 7-4 for all aircraft under their jurisdiction.

(2) Perform required review of individual aircraft weight and balance files as described in paragraph 7-6 for all aircraft under their jurisdiction.

(3) Comply with weight and balance provisions of applicable modification work orders or technical manuals pertaining to aircraft modifications.

(4) Provide training and assistance in the use of weight and balance data and load adjuster devices, when applicable.

(5) Assure aircraft under their jurisdiction are weighed per paragraph 7-7.

### 7-3. Aircraft weight and balance classifications

Army aircraft weight and balance classifications are stated in the appropriate operator's manual and are defined as follows:

a. Class 1 aircraft are those whose weight or center-of-gravity limits can sometimes be exceeded by loading arrangements normally used in tactical operations. Therefore, limited loading control is needed.

b. Class 2 aircraft are those whose weight or center-of-gravity limits can readily be exceeded by loading arrangements normally used in tactical operations or those aircraft designed primarily for transporting troops and other passengers. Therefore, a high degree of loading control is needed. Also, all aircraft whose weight and balance class is not stated in the operator's manual will be considered Class 2.

### 7-4. Aircraft weight and balance file

a. This file will contain all of the aircraft's weight and balance data. The aircraft designation and serial number will be noted on the file folder. Each aircraft will have its own file that will usually be retained aboard that aircraft. When an aircraft will be operated only in close proximity to its home station or some similar single location, the weight and balance file may be removed from the aircraft at the discretion of the local commander provided the following conditions are met:

(1) The file is located so that it is readily available for update in the event of removal or addition of aircraft equipment or other actions.

(2) Duplicate copies of all DD Forms 365-4 in the file are carried aboard the aircraft.

(3) Local procedures are established to assure that duplicate DD Forms 365-4 carried aboard the aircraft are updated and remain valid.

b. The file will include the following forms and charts, which will be completed and retained in accordance with instructions of TM 55-1500-342-23.

(1) DD Form 365 (Record of Weight and Balance Personnel).

(2) DD Form 365-1 (Chart A—Basic Weight Checklist Record).

3. DD Form 365-2 (Form B—Aircraft Weighing Record).

(4) DD Form 365-3 (Chart C—Basic Weight and Balance Record).

(5) Chart E (Loading Data and Special Weighing Instructions). The original Chart E placed in the weight and balance file by the

aircraft manufacturer will be retained in the file until a revised Chart E is presented in the aircraft maintenance manual. Following publication of the Chart E in the maintenance manual, the Chart E in the aircraft file will no longer be required and will be destroyed locally.

(6) DD Form 365-4. Sufficient completed DD Forms 365-4 will be in the file, enabling the pilot to determine proper aircraft loading for any normal anticipated unit mission and verify that the weight and center-of-gravity will remain within allowable limits for the entire flight.

c. Electronic computer data sheets may be used instead of any of the DD Form 365 series when information is identical to that required on the DD 365-series. Any computer data sheets which meet this requirement may be used. The Army standard automated system (USAF Edwards' automated weight and balance system) fulfills these requirements. The system program may be obtained from Commander, Aviation and Missile Command, ATTN: AMSAM-I-MDC, Redstone Arsenal, Huntsville, AL 35898 for nonstandard Army aircraft, the commercial equivalents of basic weight checklists, loading data, and weighting instructions may be substituted for DD Forms 365-1 and Chart E. All of the above forms are available through normal publications supply channels.

### **7-5. Removal, addition, or relocation of aircraft equipment**

When aircraft equipment that is part of aircraft basic weight is added to, removed from, or relocated within the aircraft because of maintenance or specific mission requirements, flight in this changed configuration will not be accomplished unless the weight and balance change is documented by one of the following methods:

a. Treating the additions, removals, or relocations as a permanent change by making entries on the DD Form 365-3 and establishing a new basic weight and moment. Also if the change in basic weight or moment is beyond the limits stated in TM 55-1500-342-23, prepare new DD Forms 365-4 that reflect the new basic weight and moment to replace those in the weight and balance file.

b. If the changes are of a temporary nature, make entries on DA Form 2408-13 series (aircraft inspection and maintenance record) and DA Form 2408-14 (Uncorrected fault record) following the instructions provided in DA Pam 738-751 and TM 55-1500-342-23. Temporary changes in basic weight may be reflected on DA Form 2408-13 series or DA Form 2408-14 for a period not to exceed 90 days. If not accomplished sooner, the DD Form 365-3 will be updated to reflect the temporary change at the expiration of this 90 day period.

### **7-6. Reviewing weight and balance file**

a. All DD Forms 365-4 in the aircraft weight and balance file and all duplicate DD Forms 365-4 in the aircraft will be checked for accuracy in accordance with the criteria established in TM 55-1500-342-23 at least every 90 days. New forms must be prepared if changes are required. If no changes are required, the DD Forms 365-4 will be redated and initialed in the date block to certify their currency.

b. In addition, all weight and balance records will, as a minimum, be reviewed every 12 months. The last day of the month is the final day for completing the review. For example if the previous review was completed on 8 April, the next review must be completed by 30 April of the following year. This review must include a weight and balance inventory of the aircraft and the following statement entered on the DD Form 365-3: "Annual review and inventory completed." The date and adjusted basic weight and moment will accompany this entry.

### **7-7. Aircraft weighing**

a. Each aircraft will be weighed when—

(1) Overhaul or major airframe repairs are accomplished.

(2) Any modifications or component replacements (including painting) have been made for which the weight and center-of-gravity cannot be accurately computed.

(3) Weight and center-of-gravity data records are suspected to be in error.

(4) The period since the previous weighing reaches 36 months for a Class 1 aircraft and 24 months for a Class 2 aircraft. The last day of the month is the final day for reweighing. For example, if a Class 1 aircraft was last weighed on 5 January 1990, it must be reweighed by 31 January 1993.

b. The weight records supplied with a new aircraft may be used instead of an initial weighing.

c. If these weighing requirements are not met, the aircraft status will change to red "x" until they are met.

d. Any maintenance facility providing weighing service will ensure that all aircraft weighing equipment under its jurisdiction is tested and certified for accuracy according to specified technical manuals and at the intervals required.

## **Chapter 8 Aviation Life Support**

### **Section I Aviation Life Support System**

#### **8-1. General**

This chapter establishes responsibilities, policies, and procedures governing the U.S. Army Aviation Life Support System (ALSS).

a. The CG, AMC, Project Manager, Aviation Life Support Equipment (ALSE), is the DA focal point for all aviation life support equipment life cycle management.

b. The CG, TRADOC, is responsible for doctrine, training, and materiel needs for the ALSS.

c. The Surgeon General will coordinate health hazard assessment for research, development, testing, and evaluation of medical materiel and related items; medical design criteria; and other medical aspects of nonmedical ALSE items.

d. MACOM commanders will—

(1) Implement ALSS policies and procedures.

(2) Ensure proper training, budgeting, and availability of ALSE.

(3) Provide trained personnel for ALSE maintenance and inspection.

e. Commanders at all levels will provide proper ALSE and related training commensurate with the mission and operational environment. Specific equipment requirements are delineated in section II. Specific personnel and training requirements are delineated in section III. ALSE maintenance requirements are delineated in section IV.

f. Aviation officers will have overall staff supervision of ALSS activities and coordination with staff sections and commanders on matters pertaining to ALSE and training.

g. Flight surgeons and aeromedical advisors are responsible for—

(1) Physiological training of aircrew personnel.

(2) Medical aspects of survival training of aircrew personnel.

(3) Monitoring the fitting and use of ALSE by aircrew personnel.

h. Aviation Safety Officers (ASO) will monitor all aviation activities for commands to ensure the proper use of protective clothing and ALSE. Lack or misuse of protective clothing and ALSE constitute grounds for an operational hazard report (OHR). OHRs will be submitted on DA Form 2696-R under AR 385-95.

i. Aviation Life Support Officers (ALSO) will be appointed on orders to assist, advise, and represent commanders in all matters pertaining to the ALSS. ALSOs will—

(1) Review, analyze, and develop procedures to ensure the planning, budgeting, and maintenance of an ALSS.

(2) Ensure training of aircrew personnel in the proper operation, use, and operator maintenance of survival equipment and the techniques of survival.

(3) Supervise the life support section and ensure that qualified personnel are available for conducting life support and survival training and maintenance of organizational level ALSE.

(4) Keep a current file of regulations, procedures, and technical

manuals pertaining to inspection, maintenance, and use of assigned life support equipment.

(5) Ensure units have adequate information and training before using new equipment or system changes.

(6) Ensure units encourage life support suggestions and OHRs.

(7) Ensure materiel deficiency reports are submitted on life support equipment failing to operate as designed.

(8) Participate as an ALSE member on the unit aviation safety council.

(9) Assist higher headquarters in standardizing the ALSS program.

j. Aviation life support equipment technicians and specialists will be appointed to assist, advise, and represent the ALSS in all matters pertaining to ALSE. Specifically, they will—

(1) Establish a library of ALSE publications and ensure that the unit's pinpoint distribution account is updated to include ALSE publications and necessary forms.

(2) Ensure that all ALSE is maintained in a high state of readiness through inspecting, cleaning, fitting, testing, adjusting, and repairing.

(3) Maintain files on inspection, maintenance, expiration dates, and supply pertaining to ALSE.

(4) Participate as enlisted representatives at aviation safety meetings and conferences.

(5) Participate in local ALSE steering council meetings.

(6) Inspect all controlled drugs used in survival kits and vests.

k. Pilots-in-command will ensure that ALSE commensurate with the mission and the operational environment is available on the aircraft and that aircrew members and passengers are briefed on its location and use.

## 8-2. System description

a. The ALSS consists of components, techniques, and training required to ensure aircrews and their passengers the best possible flight environment. Beyond providing for maximum functional capability of flying personnel throughout all environments experienced during normal missions, the ALSS also affords the means to enhance safe and reliable escape, descent, survival, and recovery in combat and emergency situations. These capabilities are achieved by the integration of three subsystems, each composed of functionally related components, which comprise the ALSS. This integration effort is to ensure maximum combat mission effectiveness of the total weapon system by enhancing the performance potential of the crew member.

b. The ALSS is composed of three subsystems as follows:

(1) The environmental life support and protective subsystem provides optimum support, protection, and comfort to flying personnel and their passengers in all normal flight environments. Maximum mission effectiveness is enhanced by superior aircrew station and personal equipment such as oxygen equipment, aircrew support facilities, flight and specialized clothing, and miscellaneous personal accessories and equipment. Environmental support equipment includes but is not limited to the list below.

(a) Flight clothing items include gloves, helmets, fire retardant flight suits, aircrew environmental clothing such as parkas, fire retardant chemical biological (CB) suits, masks, hoods, and boots.

(b) Aircrew body armor is an ensemble.

(c) Environmental control items include pressure gauges, temperature gauges, and humidity gauges.

(d) Warning devices include hypoxia warning devices and nuclear, biological, and chemical (NBC) detection alarms.

(e) Oxygen systems include in-flight equipment, walk-around equipment, on-board equipment, oxygen bottles, oxygen hoses, oxygen regulators, and oxygen connectors.

(f) Protective masks include aircrew CB protective masks, oxygen masks, and smoke masks.

(g) Eye protection devices include nuclear flash protective devices, laser protective goggles, visors, and glasses, smoke goggles, clear and tinted visors and sunglasses.

(h) Support equipment may include flashlights, pilot clipboards, microphones and headsets, fire extinguishers, and first aid kits.

(i) Restraint devices include seat and lap belts, shoulder harnesses, five-point restraint systems, inertia reels, gunner restraint systems, and inflatable body and head restraints.

(j) Fixed crew seats, troop seats, armored crew seats, crash-worthy crew seats, crash-worthy devices, cockpit airbags, energy attenuation devices, nonflammable materials, airframe mounted armor plating designed to protect the aircrew.

(2) The escape and descent life support subsystem components are provided to ensure safe and reliable escape and descent from disabled aircraft. Presently included are harnesses, parachutes, ejection seats, propellant devices, Let-down ropes and equipment. Also included are devices to improve capabilities for crew and passenger escape either onto the ground or into the water through explosively created exits, escape slides and helicopter emergency egress device (HEED). Equipment includes but is not limited to the list below.

(a) Forced escape devices may include ejection seats, extraction device, crew escape systems, rocket catapults, seat stabilizers, and propellant actuated devices.

(b) Controlled descent devices including ground evacuation slides, and aircrew ladders.

(c) Manual escape devices including door and canopy jettison devices, breakout knives, crash rescue axes, and crash rescue equipment.

(3) Survival recovery life support subsystem aids survival, escape, evasion, and recovery of downed aircrews and their passengers in any global environment. Components include life preservers and rafts, anti-exposure suits, and survival kits and vests. Signaling devices such as lights, flares, beacons, survival radios, personal locating devices, and power sources are also included to locate personnel. Equipment includes but is not limited to the list below.

(a) Survival clothing may encompass cold weather clothing, wet suits, and antiexposure suits.

(b) Distress incident locators include electronic transmitters, personnel locator systems, rescue beacons, visual signal devices, audible signal devices, and search and rescue radios.

(c) Rescue equipment includes rescue hoists, rescue harnesses and rescue seat forest penetrator.

(d) Survival equipment consists of, but is not limited to, survival kits and vests, survival weapons, food packets, first aid kits, sleeping bags, life preservers, and rafts.

(e) Signal devices may include flares, strobe lights, and ground signaling panels.

## Section II

### Aviation Life Support Equipment

#### 8-3. Aviation life support equipment

Aviation life support equipment (ALSE) will be used per unit standing operating procedures and this section.

#### 8-4. Authorization for ALSE

Requirements and authorization for ALSE are identified in this regulation and in—

a. AR 71-13.

b. Common table of allowances (CTAs) 8-100, 50-900, 50-909, and 50-970.

c. Supply Bulletins (SBs) 8-75 and 700-20.

d. Applicable modified tables of organization and equipment (MTOEs) and tables of distribution and allowances (TDAs).

#### 8-5. Flight data recorders

Flight data recorders (FDRs) installed on a selected aircraft should be operational for all flights. However, a nonoperational FDR will not result in mission cancellation.

#### 8-6. Aircraft safety equipment

Safety equipment, (for example, first aid kits, fire extinguishers, breakout knives, and fire axes) will be installed in Army aircraft per

requirements of the appropriate operator manual. Medical supplies will be updated, deleted, and extended according to SB 8-75.

### **8-7. Oxygen system**

See FM 1-301 for restrictions on use of oxygen. Approved oxygen systems will be used as follows:

a. Unpressurized aircraft. Oxygen will be used by aircraft crews and occupants for flights as shown below:

(1) Aircraft crews.

(a) On flights above 10,000 feet pressure altitude for more than 1 hour.

(b) On flights above 12,000 feet pressure altitude for more than 30 minutes.

(2) Aircraft crews and all other occupants.

(a) On flights above 14,000 feet pressure altitude for any period of time.

(b) For flights above 18,000 feet pressure altitude, oxygen prebreathing will be accomplished by aircrew members. Prebreathing may utilize either 100 percent gaseous aviator's oxygen from a high pressure source, or an onboard oxygen generating system (OBOGS) that supplies at least 90 percent oxygen in the inspired gas. Prebreathing will be for not less than 30 minutes at ground level and will continue while en route to altitude. In those extraordinary cases where mission requirements dictate rapid ascent, commanders may authorize shorter prebreathing times on a case-by-case basis, with the realization that such practice increases the risk for developing altitude decompression illness. Return to NORMAL OXYGEN (pressure demand regulator, gaseous oxygen-equipped aircraft) is authorized on descent below 18,000 feet pressure altitude, provided continued flight will not exceed this altitude.

b. Pressurized aircraft.

(1) In flight, cabin pressure altitude will be maintained at or below 10,000 feet.

(2) As a minimum, a 10-minute emergency supply of oxygen will be available to all occupants when the aircraft is above 14,000 feet pressure altitude. Additional emergency oxygen will be on board when factors such as terrain, weather, or fuel consumption prevent descent to 10,000 feet cabin pressure altitude, in the event of depressurization. Above 25,000 feet pressure altitude, oxygen masks will be connected and readily available.

(3) If pressurization is lost in flight above 14,000 feet pressure altitude, descent will be made immediately to a cabin pressure altitude of 10,000 feet or below. Thereafter, the provisions of paragraph a above apply.

### **8-8. Parachute requirements**

a. Crew members will wear parachutes on flights involving aerobatics.

b. Commanders will determine if occupants need to wear parachutes in all other cases and publish policies in unit standing operating procedures.

c. The provisions of FAR, Part 105, apply to all Army flights (except emergencies) where parachute drops of persons or things are made from an Army aircraft.

d. If there is an accident involving the use of parachutes, reports must be submitted per AR 385-40 and TM 10-1670-201-23.

### **8-9. Protective clothing and equipment**

a. Proper wearing of fire-resistant flight clothing includes sleeves rolled down and the use of fire resistant flying gloves.

b. Items of clothing for specific geographic areas as listed in the appropriate CTA are also authorized when required by climatic conditions.

c. The following U.S. Army approved clothing and equipment will be worn by all crew members when performing crew duties:

(1) Leather boots.

(2) Flight helmet.

(3) Flight suit.

(4) Flight gloves.

(5) Cotton, wool, or nomex underwear.

(6) Identification tags.

d. Major Army commanders, USARC, CNGB, and CG, USAAVNC may waive the requirements in (1) through (5) above for crew members assigned to flights that require other uniforms.

e. Passengers will wear approved hearing protection devices.

### **8-10. Protective masks**

a. At least one pilot seated at the controls must wear a protective mask when fuzed items filled with toxic chemicals are carried in aircraft. Other crew members will have protective masks readily available.

b. When incapacitating or toxic chemicals with no arming or fuzing systems are carried in an aircraft, the pilots need not wear a mask. It will be readily available.

c. All personnel aboard will wear a protective mask when incapacitating or toxic chemicals are dispensed and until the chemical safety officer or other crew member reports the aircraft is clear of the dispensed agent.

d. Personnel who are not essential to the mission will not be carried in an aircraft with incapacitating or toxic chemicals on board.

### **8-11. Seat belts and restraints**

a. The pilot in command will ensure that—

(1) There are installed seats and seat belts for each passenger on the aircraft.

(2) Passengers can operate seat belts and, if installed, shoulder harness.

(3) Passengers are in seats and restrained by seat belts and, if installed, shoulder harness during takeoffs, landings, and turbulence.

(4) Patients on litters will be restrained by litter restraining straps during takeoffs, landings, and turbulence.

b. The crew members will wear a properly adjusted seat belts and shoulder harness when at the controls.

c. Other crew members will wear an approved restraining harness instead of seat belts when required by mission.

d. Parachutes, rappellings, and special purpose insertion and extraction operations (for example, SPIES, STABO and FRIES), can be performed without seats installed.

e. Flying with troop seats removed in the UH-60 aircraft is authorized for air assault/mobile mission training, but is considered high risk. Training will be authorized on a case-by-case basis using the following procedures:

(1) The troop commander must do a thorough risk assessment.

(2) Request a waiver from the requirements in para 8-11a above for each training event to the first four-star general in the chain of command.

(3) The first four-star general in the chain of command is the waiver approval authority. This authority will not be delegated below the two-star level.

(4) Waiver authority is to be exercised on a case-by-case basis only. Blanket waivers are not authorized.

### **8-12. Survival equipment**

The commander will ensure that personnel are equipped with ALSE appropriate for the mission, topography, and climate along the proposed route of flight. Use will be in accordance with the ALSE program.

a. Each aircraft crew member will wear a survival vest with components on all flights as identified in TM 55-1680-317-23 & P. MACOM commanders, numbered Army commanders, the CNGB, or the Commander, USAAVNC, may waive this requirement for multiengine airplanes.

b. Each aircraft crew member will be equipped with a survival radio when available. For multiengine airplanes where the requirements for survival vests has been waived, a minimum of two survival radios will be carried at all times on board the aircraft.

c. All Army aircraft will carry appropriate survival kits for all crew members appropriate to the geographical areas in which flight will be conducted.

d. Local commanders will provide the minimum essential climatic protective clothing and equipment as required.

e. Aircraft engaged in over-water flight will adhere to the following requirements:

(1) All personnel aboard Army aircraft flown beyond gliding distance of land will—

(a) Single-engine aircraft occupants must wear life preservers.

(b) Multi-engine aircraft occupants must wear or have life preservers readily available.

(2) The following survival equipment is the minimum required on all Army aircraft during flights made in excess of 30 minutes flying time or 100 nautical miles from the nearest shoreline:

(a) Survival kits, life raft(s) sufficient for all persons on board. (See TM 1-1500-204-23-1, table 11-4.)

(b) Aviation unit commanders will develop a policy for the wear of anti-exposure suits aboard Army aircraft when any portion of the flight is over water and ambient water temperature is 60 degrees Fahrenheit or below. This policy should be reflected in the risk assessment performed for the flight and will include as a minimum:

(1) Type of aircraft being flown.

(2) Altitude to be flown.

(3) Availability of search and rescue.

(4) Types of anti-exposure suits (constant wear or quick-don) available.

(c) Ferry flight equipment will be per AMCOM ferry flight packet instructions. The command providing delivery aircrews must provide the proper ALSE.

(d) Aircrews carrying the Helicopter Emergency Egress Device (HEED) will complete U.S. Navy initial and annual recurrent HEED training or equivalent, prior to carrying the HEED on over-water flights.

### Section III

#### Personnel and Training Requirements

##### 8-13. ALSE maintenance personnel

Commanders having operational control of Army aircraft will provide personnel to perform required maintenance on ALSE. The number of personnel necessary to perform this maintenance is dependent on the number of personnel serviced and the type and density of ALSE. One ALSE maintenance person on a full-time basis should be adequate to maintain the equipment for up to 50 personnel. Commanders using personnel in a part-time capacity must adjust the number required to ensure that all required inspections and maintenance on ALSE is performed.

##### 8-14. Training of ALSE maintenance personnel

a. Maintenance of ALSE should be performed only by trained, qualified personnel, either military or civilian.

b. ALSE maintenance personnel should be graduates of the U.S. Air Force C3AABR92230-000, U.S. Navy LSE C-602-2010, U.S. Army 860-ASIQ2, or other courses of instruction approved by the U.S. Army Aviation Logistics School (USAALS), which has responsibility for Army ALSE maintenance training.

##### 8-15. Training for aircrews

Prior to initial flight training and at least once annually, Commanders will ensure that all aircrew personnel are adequately trained in the operation, use, and operator maintenance of ALSs.

### Section IV

#### ALSE Maintenance Requirements

##### 8-16. Maintenance requirements

a. Commanders are required to establish and equip ALSE maintenance shops, staffed by qualified ALSE maintenance personnel on a full-time or part-time basis.

b. ALSE maintenance shops will be tailored to the needs of the aviation unit, activity, or facility based on the number of aircrew members serviced and the density and type of ALSE.

c. ALSE maintenance shops may be consolidated where the pooling of personnel and equipment of resident units, activities, or flight facilities would be advantageous.

d. Oxygen equipment maintenance shops will be established per TM 55-1660-245-13.

##### 8-17. Inspection, maintenance, and repair

a. Inspection, maintenance, and repair of ALSE will be accomplished by qualified ALSE maintenance personnel in accordance with either one or both of the following:

(1) The applicable TM, technical order (TO), or Naval Air (NAVAIR) publication for the item of equipment involved.

(2) The procedures prescribed by responsible AMC agencies and USAALS.

b. Deficiencies found in ALSE should be reported expeditiously under the Army Equipment Improvement Report (EIR) and Quality Deficiency Report (QDR) Program. Instructions for completing these reports are in DA Pam 738-751.

##### 8-18. Storage and work areas

Criteria for ALSE storage and work areas will ensure that—

a. ALSE maintenance shops provide adequate, clean, well-lighted work areas with proper storage, shelving, and security provisions.

b. Shop storage areas possess the following features for survival equipment:

(1) A well ventilated, cool, and dry area that provides protection from pilferage, fire, dust, insects, rodents, and direct sunlight. Recommended temperature for storage at approximately 75 degrees Fahrenheit.

(2) Adequate air space between the floor and the equipment.

c. Inspection and test areas for flotation equipment are smooth, non abrasive, and free of sharp projections, oil stains, and spills.

d. Storage and work area requirements are also stated in TM 55-1680-317-23 & P, chapter 3; TM 5-4220-202-14, chapter 2; TM 55-1660-245-13, chapter 2 and FM 1-508, chapter 4.

## Chapter 9

### Nonstandard Aircraft

#### Section I

##### Acquisition and Use

##### 9-1. General

This chapter details classification, acquisition, and use of nonstandard aircraft.

a. Aircraft classified as nonstandard by the Army are normally acquired from other services or federal agencies and are not listed as standard aircraft per AR 700-138, or were previously standardized but no longer adhere to established criteria. These aircraft are used to fill operational requirements instead of standard Army aircraft. Army standard aircraft reconfigured or altered for special use (for example, testing, special mission, and modification) are not normally classified as nonstandard aircraft within the context of this regulation.

b. Acquisition and use of nonstandard aircraft within the Army will occur when sufficient standard aircraft are not available to accomplish specific missions or operations. All other aircraft in the Army inventory, including aircraft obtained through the confiscated or excessed aircraft program, are nonstandard aircraft. Selected maintenance trainers, prototype, and test bed aircraft may be accounted for as nonstandard aircraft.

##### 9-2. Policy

The following is DA policy concerning nonstandard aircraft:

a. Requests for nonstandard aircraft will normally be approved only against a DA approved aircraft authorization when standard Army aircraft are not available. Nonstandard aircraft will be replaced when standard Army aircraft become available. When requests for nonstandard aircraft are approved by DA, AMCOM will

take the necessary acquisition action. Requests for nonstandard aircraft will be forwarded through the MACOM to Commander, Aviation and Missile Command, ATTN: AMSAM-I-L, Redstone Arsenal, Huntsville, AL 35898 for processing to DA.

b. Requests for authorization to obtain nonstandard aircraft will be transmitted through channels to HQDA, DCSLOG, ATTN: DALO-AV, 500 ARMY PENTAGON, WASH DC, 20310-0460, and include:

(1) Mission, type, design, and series of aircraft desired or type and requirements of missions to be fulfilled.

(2) Terms of request; transfer or loan, nonreimbursable or reimbursable.

(3) Budget program funds to be used for support of the aircraft and affirmation that funds will be made available in current and subsequent fiscal year funding programs.

(4) Any modification requirements, including minimum required equipment listed in table 5-3.

(5) Full justification based on essentiality of the aircraft to accomplish missions of the requesting command or activity.

c. All operating costs, less depot maintenance and procure-spare parts associated with the acquisition of nonstandard aircraft, will be borne by the gaining command. The AMC, USAR, and ARNG are responsible for programming and budgeting for depot maintenance of nonstandard aircraft. Modification of nonstandard aircraft (in a non-developmental program) will normally be funded by the Army Procurement Appropriation (for acquisition of modification kits) and by the Active Army's depot maintenance program (for the installation of the kits.)

d. Requests for disposition instructions for nonstandard aircraft will be forwarded through command channels to DA. Serviceable and unserviceable economically repairable aircraft will be reassigned against other requirements or disposed of per AR 750-1 and TB 43-0002-3. Commands and activities relinquishing these aircraft will not normally be provided a replacement nonstandard aircraft. Aircraft considered uneconomically repairable will be reported to DA per TB 43-0002-3. Redistribution of nonstandard aircraft is not authorized unless approved by DA.

e. Commands and activities acquiring nonstandard aircraft will be required to provide support from their own operating funds. Repair parts that are available in the DOD supply system may be procured through normal Army supply channels or through cross-service agreements with other military services. All other repair parts will be procured locally. All nonstandard aircraft maintenance requirements that are beyond the capability of the owning or supporting commands and activities will be accomplished by contract. (This paragraph is not applicable to aircraft maintained under the existing contractor logistics support contract administered by AMCOM.)

f. Commanders having nonstandard aircraft will be responsible for assuring continued aircraft airworthiness through scheduled maintenance programs that meet all DOD or, as required, FAA published standards. Aircraft obtained through the confiscated or excessed aircraft program will be maintained per FAA standards only. Commercial operator's manuals, service letters, and bulletins published by the aircraft manufacturer and FAA Airworthiness Directives (AD) will be ordered and maintained by the unit. When an AD note is issued by the FAA that is required to be completed prior to further flight, AMCOM will issue corresponding SOF messages per chapter 6 of this regulation. Compliance with emergency AD notes will be reported directly to Commander, Aviation and Missile Command, ATTN: AMSAM-SF-A, Redstone Arsenal, Huntsville, AL 35898.

g. When upgrade modifications are made to a confiscated or excessed aircraft with a military equivalent, the modification will conform as closely as possible to its standard military counterpart provided an FAA type certificate or supplemental type certificate exists for that modification and AMCOM approval is obtained. Equivalent nonstandard aircraft may be included with their standard counterpart when a Product Improvement Program (PIP) is applied to the standard aircraft.

h. Expenditures in funds and man-hours for alterations or reconfiguration will be held to a minimum. Initial requests to alter or reconfigure nonstandard aircraft when first delivered will be compiled into a single package and submitted through command channels to AMCOM for approval; they will contain detailed justification including scope of work to be performed. Subsequent requests will be treated in the same manner. Alteration or reconfiguration of loaned nonstandard aircraft must be consistent with any requirements in the specific loan agreement regarding restoration of the aircraft to its original configuration.

i. All nonstandard aircraft will be reported on DA Form 1352 (Army Aircraft Inventory, Status and Flying Time) per AR 700-138. Maintenance forms authorized by DA Pam 738-751, will be used as prescribed in the published Logistical Support Plan. Other forms may be used for local management purposes as desired.

j. A DA flying hour program will not be published for nonstandard aircraft. Commanders will establish an annual Fiscal Year Flying Hour Program based on requirements and capability to support such a program. Utilization criteria prescribed in AR 71-13 will be the basis for justifying retention of nonstandard aircraft.

### 9-3. Logistical support

AMCOM will retain responsibility and designate a central point of contact for logistical support guidance, SOF matters, and technical guidance, including configuration control and EIR. AMCOM has fiscal and operational responsibility for aircraft obtained through the confiscated or excessed aircraft program from transfer from the courts and General Services Administration (GSA) until delivery to the gaining unit. They will publish operating and maintenance guidance for these aircraft. AR 700-120 requirement for MACOMs to furnish delivery crews does not apply to the initial delivery of confiscated or excessed aircraft.

## Section II Training and Standardization

### 9-4. Waiver Authority

Nonstandard aircraft training and standardization requests for waivers will be forwarded through the appropriate MACOM or CNGB to DAMO-TRO, for approval on paragraphs 9-5 through 9-9.

### 9-5. Official Publications

a. Training and aviation flight standardization literature for specific nonstandard aircraft will be made available through normal publications supply channels. Operator's manuals, checklists, and related publications for other nonstandard aircraft will be obtained from existing factory stocks or from the military service supplying the aircraft.

b. The using unit will update these publications. They will also prepare new or revised training literature for nonstandard aircraft not supported by official publications. The MACOM, installation or area aviation standardization committee must approve these locally prepared publications before they can be used.

### 9-6. Training and Standardization

If possible, the training and aviation flight standardization program will apply to the operation of nonstandard aircraft. The policy in this chapter applies only when established procedures cannot be followed because of extremely low aircraft density.

### 9-7. Qualification Training

The MACOM, installation, or area aviation standardization committee will develop a training syllabus for nonstandard aircraft. The syllabus will be submitted through the MACOM to USAAVNC ATTN: ATZQ-TDS-T, Fort Rucker, AL 36362-5211, for approval before training begins.

### 9-8. Flight Evaluations

When IPs or SPs are not available to administer flight evaluations in nonstandard aircraft, the installation or area aviation standardization

committee will request support. The MACOM aviation standardization committee, other installation area committees, or the Commander USAAVNC, may provide support. If support cannot be provided, the area commander, whose installation aviation standardization committee has jurisdiction, may authorize the flight evaluation to be made in an aircraft of similar design, operation, and flight characteristics. The commander may request a waiver of the evaluation requirements.

#### **9-9. Qualification Requirements for IPs**

a. The installation or area aviation standardization committee, in accordance with the Commander, USAAVNC ATTN: ATZQ-ES, will set the content of IP training in nonstandard aircraft for which no IP training program exists in the ATMs. The proposed program will be submitted through channels to the MACOM commander before training begins.

b. When an SP is not available to administer a flight evaluation in the aircraft in which an IP designation is sought, the evaluation may be conducted in another aircraft in the same category. The examinee must be qualified and current in the aircraft used for the evaluation.

### **Chapter 10 The Army Flying Hour Program**

#### **10-1. Objective**

a. This chapter sets forth responsibilities, policies and procedures for management and operation of the Army flying hour program (FHP) by MACOM/agency flying hour managers.

b. The objectives of the chapter are to—

(1) Standardize the management and operation of the FHP.

(2) Ensure that resources allocated to the FHP are used in the most economical manner and achieve the greatest training impact.

#### **10-2. Responsibilities**

a. The DCSOPS has Army Staff responsibility for establishing aviation training priorities and developing and managing the FHP.

b. Director, U.S. Army Cost and Economic Analysis Center (USACEAC). The Director, USACEAC, is responsible for developing and providing aircraft cost rate data in support of the FHP.

c. The ASA(FM) is responsible for publishing and distributing Program Budget Guidance (PBG), Volume 1 for use by MACOM/agency resource and flying hour managers.

d. Commanders of MACOMs and Army agencies. Commanders of MACOMs and Army agencies are responsible for the implementation and administration of their FHPs in accord with this chapter.

e. Commander, AMCOM is responsible for establishing the policy for administration of the life cycle contractor support (LCCS) contract for the OSA fleet.

#### **10-3. FHP concept of management**

a. The FHP is managed through control of flying hours in each of the three cycles that occur sometimes concurrently: the program, budget and execution cycles. However, during the execution cycle there is partial decentralization in that MACOMs/agencies are given the latitude to change the mix of flying hours.

b. DAMO-TRO uses flying hour requirements provided by MACOM/agency flying hour managers to build the program for any of the three phases. Cost rate data provided by USACEAC enables calculation of the FHP costs.

c. DAMO-TRO notifies MACOMs/agencies of the approved FHP through Program Budget Guidance (PBG) VOL 1, a document normally published at the conclusion of the program and budget cycles. During the execution year, DAMO-TRO publishes message traffic to communicate the execution year program.

d. Flying hour requirements emanate at the unit level and flow upwards through the MACOMs/agencies to DAMO-TRO. Aviation

units determine flying hour requirements in accord with the Aircrew Training Program (para 4-1).

e. In the execution year, the approved FHP sent by DAMO-TRO to the MACOMs/agencies is divided into a phased execution plan by quarter and sent back to HQDA to serve as the projected hours for each quarter. Executed flying hours sent at the end of each quarter are compared to the projected hours to determine success rates. Deviations of five or more per cent from projections require explanation. Projections, execution and explanations are reported to the Army leadership.

#### **10-4. FHP management cycle**

a. The program cycle requires that MACOMs/agencies provide estimates of flying hour requirements and some force structure data for a six-year period. The data is input by DAMO-TRO into a document, the Program Objective Memorandum (POM). The POM is built every other year. (See table 10-1.)

b. The budget cycle occurs each year starting in September and ending in January. DAMO-TRO prepares one submission in September, followed by an update of this submission in January. The September submission is The Office of the Secretary of Defense/Office of Management and Budget/Budget Estimate Submission (OSD/OMB BES). The January update of this submission is the President's Budget (PRES BUD).

(1) The OSD/OMB BES requires MACOM/agency flying hour requirements (table 10-1). There are two submissions before a new POM is built. The first submission updates what had been submitted in the first two years of the POM. The second OSD/OMB BES (following year) is an update of what had been the second year of the POM submission.

(2) The PRES BUD submission follows the OSD/OMB BES. It updates MACOM/agency flying hour requirements only if significant changes had occurred to the most current OSD/OMB BES (table 10-1). The PRES BUD FHP is submitted to Congress for funding; therefore, it receives close scrutiny for accuracy before approval of funds is granted for the year of execution.

c. The execution cycle uses the PRES BUD position as the start point. To account for any changes since that point, DAMO-TRO requires flying hour requirements and structure data to rebuild the execution year program. This occurs through the Resource Update. (See table 10-1.)

(1) The Resource Update FHP is recalculated and reconstituted. The approved FHP is sent to the MACOMs/agencies in late August. The flying hours and funding status of this program will be included.

(2) MACOMs/agencies are allotted sufficient time to flow the approved, FHP to units and to receive quarterly projections from these units. MACOMs/agencies then send the quarterly projections to DAMO-TRO (table 10-1).

(3) At the end of each quarter, MACOMs/agencies send the Quarterly Execution Reports for processing by DAMO-TRO.

#### **10-5. General FHP management policy**

a. The FHP applies to standard Army aircraft and will be centrally managed by DAMO-TRO and decentrally executed by MACOMs/agencies.

b. Hours will be managed by budget activity (BA) such as BA1, Operating Forces; BA3, Training and Recruiting; and BA4, Administration and Service-wide Support.

c. Hours are normally distributed to MACOMs/Agencies with accompanying funds; unfunded hours distributed to subordinate agencies must be accompanied with the stipulation that they may be flown only if covered by sufficient funds. Unfunded hours are not included in forecasts of execution.

d. Hours can only be cross-leveled between aircraft systems by the MACOM/agency flying hour manager.

e. FHP direct cost rates normally provided in and for the October edition of PBG Vol 1 are the only cost rates authorized for use with the FHP. Direct costs for the FHP include petroleum oils and lubricants (POL), consumable repair parts, and depot level repairable spare parts.

f. Flying hours that are tracked separately such as counterdrug and special deployments will be identified by an aircraft suffix established by DAMO-TRO.

g. DAMO-TRO determines the approved FHP in accord with current Army leadership guidance.

h. The term flying hour operating tempo (OPTEMPO) is an index used at HQDA to express the flying hour programs for rotary wing aircraft assigned in FORSCOM, USAREUR, USARPAC, EUSA, and USARSO as well as the ARNG and USAR. Flying hour OPTEMPO is not intended for use at MACOM/ Agency level for determining requirements or as a measure of achievement.

i. Flying hours for OSA aircraft supported by the LCCS contract administered by Commander, U.S. Army AMCOM will not exceed hours in the LCCS contract without approval from Commander, AMCOM (AMCPM-FW).

j. The flying hour year starts on 16 September and ends on 15 September. First quarter starts 16 September and ends 15 December; second quarter starts 16 December and ends 15 March; third quarter starts 16 March and ends 15 June; fourth quarter starts 16 June and ends 15 September.

k. Flying hours reported as being executed must mirror those hours reported on DA Form 1352 as outlined in AR 700-138.

l. After the quarterly execution report has been forwarded DAMO-TRO, errors detected in that report by MACOMs/agencies can only be corrected by applying them to the next quarter and ensuring the cumulative data is correct.

#### **10-6. Procedures for development of the POM FHP**

a. Submit MACOM/agency rollups of the six years via message (RCS CSGPO-464) to DAMO-TRO in accord with timeline established in table 10-1.

b. Provide anticipated force structure (AVG ACFT) using average number of operational aircraft (no float) along with required hours (HOURS REQ) for each year of the POM in the format shown in figure 10-1. As an example, if there will be 100 AH-1s at the start of the year and 50 AH-1s at the end of the year, use an average of 75 aircraft for the whole year. Report by BUDGET ACTIVITY when applicable. Reserve components will substitute average number of pilots for the AVG ACFT.

c. Insert counterdrug aircraft hourly requirements, for example, AH-64 CNF, in the appropriate alphanumeric order. Currently, MACOM counterdrug hours are identified by DAMO-TRO using suffixes as follows: FORSCOM, "CNF" ; USARPAC, "CNP" ; USARSO, "CNS"; INSCOM, "CNI" ; ARNG, "CNG" ; USAR, "CNR" ; USASOC, "CN." Other MACOMs/agencies tasked to provide counterdrug hours will coordinate with DAMO-TRO to obtain a suffix prior to submission of the POM FHP requirements. No aircraft numbers are required. No AVG ACFT numbers are required with counterdrug aircraft.

d. Insert special flying hour requirements, for example, AH-64A, in the appropriate alphanumeric order. Currently, MACOM/agency special flying hour requirements such as disaster relief operations are identified by DAMO-TRO using suffixes A through D; they are changed as the operational requirements change and are identified for the current year in the flying hour message to the MACOMs/agencies (para 10-8d). MACOMs/agencies tasked to provide special flying hour support will coordinate with DAMO-TRO to obtain a suffix prior to submission of POM FHP requirements. No aircraft numbers are required.

e. Flying hours for LCCS contract OSA aircraft will be programmed in accord with table 10-2, which follows the guidance supplied by the administrator of the LCCS contract, Commander, AMCOM (AMCPM-FW).

f. Exceptions to the flying hour program requirements stated in table 10-2 must be coordinated with and approved by Commander, AMCOM (AMCPM-FW) in conjunction with DAMO-TRO. For example, a MACOM/agency with 10 C-12 aircraft may not exceed 6000 programmed flying hours without coordination and approval.

g. Upon completion of the POM build, normally in May of the POM year, the FHP POM is incorporated into PBG Vol 1 and

forwarded to the MACOMs/agencies, normally to resource managers in the May edition. FHP managers should look to the May edition of PBG VOL 1 for the latest proposed resource data for the POM and the current budget positions. In the execution year, the approved FHP data and status of funding will be transmitted to MACOMs/agencies by DAMO-TRO per paragraph 10-8.

#### **10-7. Procedures for development of the budget FHPs**

a. Submit OSD/OMB BES and PRES BUD MACOM/agency FHP requirements to DAMO-TRO in accord with timelines established in table 10-1.

b. Use applicable aircraft format for RCS CSGPO-464 in accordance with figure 10-1 and provide data as directed in paragraph 10-6.

c. The OSD/OMB BES updates information submitted for the first two years of the POM. Then there is a new POM and the cycle repeats itself. Changes in force structure and missions normally impact flying hour requirements most significantly and must be reflected in an updated OSD/OMB BES. The first year focuses on the first year of the POM; the following year focuses on the second year of the POM.

d. Submit PRES BUD FHP requirement updates only if the OSD/OMB BES FHP requirements have changed.

e. Upon completion, each budget position is incorporated into PBG Vol 1 and forwarded to the MACOMs/agencies, normally to resource managers. The OSD/OMB BES FHP is usually contained in the October edition. The PRES BUD position is normally contained in the February edition. FHP managers should look to each edition of PBG VOL 1 for the latest flying hour and cost rate information.

#### **10-8. Procedures for developing the execution year FHP**

a. Submit Resource Update position in accord with the timeline established in table 10-1.

b. Use applicable aircraft format for RCS CSPO-464 according to figure 10-1 and provide data as directed in paragraph 10-6.

c. The Resource Update is an update of the PRES BUD position; it reflects changes in force structure and requirements that will provide for a more accurate and executable program. If possible, the Resource Update position should not exceed the costs of the PRES BUD position.

d. Upon receipt of the Resource Update, DAMO-TRO will build the approved program in accord with leadership guidance and transmit via the flying hour message the approved program back to MACOMs/agencies using the applicable format of figure 10-1. The flying hour message, normally transmitted in late August, will reiterate the due date for Quarterly Projections and will provide the status of funding for the program along with any special instructions related to the program.

e. MACOMs/agencies desiring flying hour program diskettes (para 10-12 ) will indicate so as part of the Resource Update.

#### **10-9. Procedures for submitting the quarterly projections report**

a. Submit the Quarterly Projections Report (RCS CSGPO-463) per the timeline established in table 10-1.

b. Use applicable aircraft format in accord with figure 10-1. Divide the hours by aircraft type provided in the flying hour message into a quarterly, phased execution plan and submit to DAMO-TRO. Hours may not deviate from those in the message unless coordinated with and approved by DAMO-TRO.

c. The Quarterly Projections form the basis for measuring the successful accomplishment of the flying hour program by comparing them with the quarterly execution data provided in paragraph 10-10.

#### **10-10. Procedures for reporting the execution year FHP**

a. Submit each Quarterly Execution Report (RCS CSGPO-465) in accord with the timelines established in table 10-1.

b. Use applicable aircraft format in accord with figure 10-1 and

figure 10-3. Include by aircraft type the following information regarding hours flown: day hours (D); night unaided hours (N); night hours using night vision goggles (NG); and, night systems hours flown (NS). NS hours are those with night vision systems installed on aircraft used during night, for example, pilot night vision sensor (PNVS) or forward looking infrared radar (FLIR). Also, log only NS hours when two or more devices are used such as night vision goggles used in conjunction with FLIR and PNVS. Additionally, include in this report the total hours (TOTAL HOURS), the average aircraft (AVG ACFT), and the average number of pilots (AVG PILOTS) that flew per quarter. Do not include AVG ACFT or AVG PILOTS for counterdrug ACFT, and do not include operational readiness float or float aircraft numbers in the AVG ACFT count.

- c. Round hours to the nearest whole number.
- d. Include as part of the report rationale for deviations plus or minus five per cent from quarterly projections by aircraft type.
- e. Report hours flown in support of user testing and research and development testing as follows:

(1) If Operational Test Command (OPTEC) or Army Materiel Command (AMC) agree to reimburse the MACOM/agency or unit for hours flown in support of testing, the supporting unit will log the consumed hours against the test. These hours will be accountable to the OPTEC or AMC flying hour programs and will be reported accordingly by OPTEC or AMC. OPTEC or AMC will only reimburse the supporting unit for flying hour costs for preplanned hours logged against a test.

(2) If OPTEC or AMC agencies do not agree to reimburse hours flown in support of testing or if the hours are not logged against a test, then those hours are reported by the MACOM/agency or unit and the costs associated to the hours will be absorbed by the supporting unit.

f. DAMO-TRO consolidates MACOM/agency FHP execution reports into standardized formats that allow analysis of program accomplishment by the Army leadership at the end of each quarter. The analysis compares resourced and executed OPTempo, quarterly projections and execution, and cumulative versus projected execution along with rationale for deviations plus or minus five per cent from quarterly projections.

#### **10-11. Procedures for cross-leveling hours**

a. MACOMs/agencies flying hour managers can adjust and cross-level hours internally in response to changing situations throughout the execution year.

b. All costs for the cross-leveling process are the responsibility of the MACOM/agency. Additionally, for LCCS contract aircraft, the following procedures apply:

(1) The MACOM/agency is free to cross-level flying hours between similar alike series aircraft (C-12C, D, F or RC-12D, G, H).

(2) The MACOM/agency may not cross-level flying hours between different mission/design series aircraft (C-12, U-21, RC-12, and RU-21H).

(3) The MACOM/agency may purchase additional maintenance hours for each mission /design series by coordinating directly with Commander, AMCOM (AMCPM-FW). There is no requirement to notify DAMO-TRO of these additional purchased hours.

#### **10-12. Procedures for use of the MACOM flying hour program diskettes**

a. The MACOM flying hour program mirrors the execution year program in the HQDA database. Two diskettes contain the essential information necessary to track the program at the MACOM level. The first diskette contains setup information; the second diskette contains the programmed hours, aircraft distribution, pilot distribution, executed hours, and the capability to print the Quarterly Execution Report.

(1) The programmed hours reflect the Quarterly Projections submitted in accord with paragraph 10-9. MACOMs/agencies will not change them.

(2) The aircraft distribution table, the pilot distribution table, and the execution flying hours contain the same information provided in

the Quarterly Execution Report (fig 10-2). Update these tables quarterly.

(3) The Quarterly Execution Report allows comparison of programmed and executed hours to determine if there is more than a five per cent deviation, the standard for successful accomplishment of the program (para 10-10d ).

b. MACOMs/agencies desiring diskettes for the forthcoming year will indicate so in the Resource Update. DAMO-TRO will forward the diskettes and accompanying technical documentation when requested.

c. The database (total hours) can only be adjusted by HQDA. Therefore, MACOMs/agencies must obtain new diskettes whenever the database changes.

d. After the diskettes have been submitted to DAMO-TRO for execution reporting, errors found in that quarter must be corrected in the next quarter.

e. Diskettes must arrive at DAMO-TRO in accord with timelines established in table 10-1. Otherwise, use message traffic to submit the Quarterly Execution Reports (para 10-10 ).

**Table 10-1**  
**FHP management reports**

REPORT	DUE TO HQDA (DAMO-TRO)	REMARKS
POM FHP	15 DEC	During POM (even) years, e.g., 15 Dec 93 for POM 96-01, 15 Dec 95 for POM 98-03.
OSD/OMB BES FHP	1 AUG	Annually, e.g., 1 Aug 94 for FY 96 FHP, 1 Aug 95 for FY 97 FHP.
PRES BUD FHP	1 DEC	Annually. Only if there are changes to OSD/OMS BES.
RESOURCE UPDATE	15 JUN	Annually, e.g., 15 Jun 94 for FY 95 FHP.
QUARTERLY PROJECTIONS	1 NOV	Annually. Based on approved program by HQDA (DAMO-TRO).
QUARTERLY EXECUTION	QUARTERLY	10 Jan, 10 Apr, 10 Jul, 10 Oct.

**Table 10-2**  
**LCCS Contract OSA aircraft annual flying hour program**

ACFT	HOURS
C-12	600
RC-12D	600
RC-12G	600
RC-12H	600
RC-12K	600
RC-12N	600
RC-12P	600
U-21	420
C-20	900
C-21	600
C-23	600
C-26	1080
UC-35	800

FY _____	ACFT REQ	AVG ACFT	SUB-FYDP PROG	HOURS REQ
	AH-1S			
	AH-64A			
	AH-64CNF			
	CH-47D			
	OH-58A-C			
	OH-58D			
	UH-1H			
	UH-1CNR			
	UH-60			
	UH-60B			
	UH-60C			
	UH-60D			
	UH-60CNL			
	UH-60L			
	TH-67			
	C-12			
	C-12CNS			
	C-20			
	C-21			
	RC-12			
	RU-21			
	U-21			
	UV-18			

**Figure 10-1. Standard format for flying hour requirements (RCS CSGPO-464)**

---

Format for Quarterly Projections Report					
ACFT	1ST QTR	2ND QTR	3RD QTR	4TH QTR	TOTAL

---

**Figure 10-2. Format for quarterly projections report (RCS GPSGP-463).**

---



---

D	N	NG	NS	TOTAL	AVG	AVG	
ACFT	HRS	HRS	HRS	HRS	HRS	ACFT	PILOTS

---

**Figure 10-3. Format for quarterly execution report (RCS CSGPO-465)**

---

## **Appendix A References**

### **Section I Required Publications**

#### **AR 11–2**

Internal Management Control (Cited in para 1-5.)

#### **AR 15–6**

Procedures for Investigating Officers and Boards of Officers. (Cited in para 2-13.)

#### **AR 25–11**

Record Communications and the Privacy Communications System (Cited in para 6-2, 6-4, 6-10.)

#### **AR 25–30**

The Army Integrated Publishing and Printing Program. (Cited in paras 6-2b, and 6-10b.)

#### **AR 25–55**

The Department of the Army Freedom of Information Act Program. (Cited in para 2-13 and 3-15.)

#### **AR 34–4**

Army Standardization Policy. (Cited in para 4-39.)

#### **AR 40–501**

Standards of Medical Fitness. (Cited in paras 2-4a, and 4-9d.)

#### **AR 55–60**

Official Table of Distances. (Cited in para 4-11.)

#### **AR 70–62**

Airworthiness Qualification of U.S. Army Aircraft Systems. (Cited in paras 6-4a.)

#### **AR 71–13**

The Department of the Army Equipment Authorization and Usage Program. (Cited in paras 8-4a and 9-2j.)

#### **AR 95–2**

Air Traffic Control, Airspace, Airfields, Flight Activities, and Navigation Aids. (Cited in paras 2-9a, 2-11a, 2-12, 2-13, 5-1, and 5-4.)

#### **AR 95–20**

Contractor's Flight Operations. (Cited in paras 2-1c, and 2-2c.)

#### **AR 140–1**

Army Reserve, Mission, Organization, and Training. (Cited in para 4-13.)

#### **AR 335–15**

Management Information Control System. (Cited in para 2-13.)

#### **AR 385–40**

Accident Reporting and Records. (Cited in paras 3-15 and 8-8.)

#### **AR 385–16**

System Safety Engineering and Management (Cited in para 6-1.)

#### **AR 385–95**

Army Aviation Accident Prevention. (Cited in paras 3-18, 4-4, and 8-1.)

#### **AR 340–21**

The Army Privacy Program. (Cited in para 2-13.)

#### **AR 500–2**

Search and Rescue (SAR) Operations.

#### **AR 570–4**

Manpower Management. (Cited in para 2-3 and 2-4.)

#### **AR 600–105**

Aviation Service of Rated Army Officers. (Cited in paras 2-1, 2-3, 2-8, 2-13, 4-10 and 4-32.)

#### **AR 600–106**

Flying Status for Nonrated Army Aviation Personnel. (Cited in paras 2-1, 2-3, 2-8, and 4-10.)

#### **AR 611–112**

Personnel Selection and Classification Manual of Warrant Officer MOSs. (Cited in para 4-6.)

#### **AR 700–120**

Materiel Distribution Management for Major Items. (Cited in para 9-3.)

#### **AR 700–138**

Army Logistics Readiness and Sustainability. (Cited in paras 9-1, 9-2, and 10-5.)

#### **AR 750–1**

Army Materiel Maintenance Policy and Retail Maintenance Operations. (Cited in para 9-2d.)

#### **AR 750–10**

Modification of Materiel and Issuing Safety-of-Use Messages and Commercial Vehicle Safety Recall Campaign Directives. (Cited in paras 6-2b and 6-10b.)

#### **CTA 8–100**

Army Medical Department Expendable/Durable Items. (Cited in para 8-4b.)

#### **CTA 50–900**

Clothing and Individual Equipment. (Cited in para 8-4b.)

#### **CTA 50–909**

Field and Garrison Furnishings and Equipment. (Cited in para 8-4b.)

#### **CTA 50–970**

Expendable/Durable Items. (Cited in para 8-4b.)

#### **DA PAM 310–20**

Administrative Publications: Action Officers Guide. (Cited in paras 6-2 and 6-10.)

#### **DA PAM 351–4**

Army Formal Schools Catalog. (Cited in para 4-6a.)

#### **DA PAM 738–751**

Functional User' Manual for the Army Maintenance Management System-Aviation (TAMMS-A). (Cited in paras 2-5, 6-2, 6-10, 8-17 and 9-2.)

#### **FAR 91**

General Operating and Flight Rules.

#### **FAR 105**

Parachute Jumping. (Cited in para 8-8.)

#### **FM 1–103**

Army Airspace Command and Control in a Combat Zone (Cited in para 2-11c.)

**FM 1-120**

Army Air Traffic Services Contingency and Combat Zone Operations. (Cited in para 2-11c.)

**FM 1-300**

Flight Operations and Airfield Management. (Cited in para 2-8a.)

**FM 1-301**

Aeromedical Training for Flight Personnel. (Cited in para 8-7.)

**FM 1-508**

Maintaining Aviation Life Support Equipment (ALSE) (Cited in para 8-18.)

**SB 8-75**

Series Army Medical Department Supply Information. (Cited in paras 8-4c and 8-6.)

**SB 700-20**

Army Adopted/Other Items Selected for Authorization/List of Reportable Items. (Cited in para 8-4c.)

**TB 43-0002-3**

Maintenance Expenditure Limits for Army Aircraft. (Cited in para 9-2d.)

**TC 1-210**

Commander's Guide. (Cited in paras 2-12, 3-16, 4-1, 4-4, 4-7, 4-9, 4-11, 4-14, 4-15, 4-17, 4-20 and 4-32.)

**TM 1-1500-204-23-1**

General Aircraft Maintenance Practices (Cited in para 8-12.)

**TM 1-1500-328-23**

Aeronautical Equipment Maintenance Management Policies and Procedures. (Cited in para 4-29.)

**TM 5-4220-202-14**

Maintenance Instructions with Parts Breakdown for USAF flotation Equipment. (Cited in para 8-18.)

**TM 10-1670-201-23**

Organization and Direct Support Maintenance Manual for General Maintenance of Parachutes and Other Airdrop Equipment. (Cited in para 8-8.)

**TM 38-250**

Preparation of Hazardous Materials for Military Air Shipment. (Cited in para 5-1.)

**TM 55-1500-342-23**

Army Aviation Maintenance Engineering Manual Weight and Balance. (Cited in paras 7-4b, 7-5, and 7-6a.)

**TM 55-1660-245-13**

Maintenance Instructions: Oxygen Equipment. (Cited in para 8-16, 8-18.)

**TM 55-1680-317-23&P**

Aviation Unit and Aviation Intermediate Maintenance Manual with Repair Parts and Special Tools List for Army Aircraft Survival Kits. (Cited in paras 8-12a and 8-18.)

**Section II****Related Publications**

A related publication is merely a source of additional information. The user does not have to read it to understand this regulation.

**AR 10-25**

U.S. Army Logistics Evaluation Agency.

**AR 55-203**

Movement of Nuclear Weapons, Nuclear Components, and Related Classified Non nuclear Material.

**AR 95-27**

Operational Procedures for Aircraft Carrying Hazardous Materials.

**AR 310-25**

Dictionary of United States Army Terms.

**AR 600-800-1**

Army Casualty and Memorial Affairs and Line of Duty Investigations.

**DA PAM 310-20**

Administrative Publications: Action Officers Guide.

**DA PAM 351-4**

Army Formal Schools Catalog.

**DOD 4515.12**

DOD Support for Travel of Members and Employees of the Congress.

**DODD 4515.13-R**

Air Transport Eligibility.

**DOD 5410.19**

Armed Forces Community Relations.

**FM 1-302**

Aviation Life Support Equipment (ALSE) for Army Aircrews.

**TM 38-240**

Packaging and Material Handling: Preparation of Hazardous Materials for Military Air Shipment.

**Section III****Prescribed Forms****DA Form 3513**

Individual Flight Records Folder, United States Army. (Prescribed in para 2-8.)

**DA Form 5484-R**

Mission Schedule/Brief. (Prescribed in paras 2-14 and 5-2.)

**DD Form 175**

Military Flight Plan. (Prescribed in para 5-2.)

**DD Form 175-1**

Flight Weather Briefing. (Prescribed in para 5-2.)

**DD Form 1801**

DOD International Flight Plan. (Prescribed in para 5-2.)

**Section IV****Referenced Forms**

Federal Aviation Administration forms can be obtained from local Department of the Regional Representatives. (See AR 95-2, table 6-1.)

**DA Form 759**

Individual Flight Record and Flight Certificate—Army.

**DA Form 759-1**

Individual Flight Record and Certificate—Army, Aircraft Closeout Summary.

**DA Form 759-2**

Individual Flight Record and Certificate—Army Flying Hour Work Sheet.

**DA Form 759-3**

Individual Flight Record and Certificate—Army Flight Record and Flight Pay Work Sheet.

**DA Form 1352**

Army Aircraft Inventory, Status, and Flying Time.

**DA Form 2028**

Recommended Changes to Publications and Blank Forms.

**DA Form 2408-12**

Army Aviator's Flight Record.

**DA Form 2408-13**

Aircraft Status Information Record.

**DA Form 2408-13-1**

Aircraft Inspection and Maintenance Record.

**DA Form 2408-14**

Uncorrected Fault Record.

**DA Form 2696-R**

Operational Hazard Report.

**DD Form 365**

Record of Weight and Balance Personnel.

**DD Form 365-1**

Chart A—Basic Weight Checklist Record.

**DD Form 365-2**

Form B—Aircraft Weighing Record.

**DD Form 365-3**

Chart C—Basic Weight and Balance Record.

**DD Form 365-4**

Form F—Weight and Balance Clearance.

**FAA Form 7233-1**

Flight Plan.

**Appendix B****Internal Control Review Checklist****B-1. Function.**

The function covered by this checklist is the administration of the management control process.

**B-2. Purpose.**

The purpose of this checklist is to assist assessable unit managers and Management Control Administrators (MCAs) in evaluating the key management controls outlined below. It is not intended to cover all controls.

**B-3. Instructions.**

Answers must be based on the actual testing of key management controls (for example, document analysis, direct observation, sampling, simulation, other). Answers that indicate deficiencies must be explained and corrective action indicated in supporting documentation. These key management controls must be evaluated at least once every five years. Certification that this evaluation has been

conducted must be accomplished on DA Form 11-2-R (MANAGEMENT CONTROL EVALUATION CERTIFICATION STATEMENT).

**B-4. Test Questions.**

(HQDA only)

*a.* Are standardized aviation safety, standardization, and utilization regulations and procedures published by a DA proponent?

*b.* Is safety-of-flight information prepared and sent to the field in a timely manner?

(User)

*c.* Are airports, heliports, and landing areas approved for flight operations?

*d.* Are local flying rules in agreement with Federal, DOD, and DA policies?

*e.* Are applicable safety regulations and special-use airspace operation guidance followed?

*f.* Are violations of safety and special-use airspace guidance reported and investigated by appropriate personnel per Federal, DOD, and DA guidance?

*g.* Are the policies, procedures and transportation eligibility requirements for Operational Support Airlift established in DOD regulation 4500.43 and DOD Directive 4515.13R being followed?

*h.* Are the procedures for Operational Support Airlift prescribed in AR 95-1 and the Operational Support Airlift Command "OSA Guide" being adhered to?

*i.* Are aircrew training programs carried out per applicable Army guidance to include flying hours and synthetic flight training?

*j.* Are personnel who do not meet proficiency requirements restricted from flight duty?

*k.* Is nonstandard aircraft acquisition, training, standardization, and use conducted according to appropriate Federal, DOD, Army, and local guidance?

*l.* Is aviation life support equipment available and maintained in accordance with applicable guidance?

*m.* Are additional flight training periods managed in accordance with applicable policies and regulations?(Reserve Component only)

**B-5. Comments.**

Help to make this a better tool for evaluation management controls. Submit comments to HQDA, DCSOPS, ATTN: DAMO-FDV, 400 ARMY PENTAGON, WASH DC 20310-0400.

**Appendix C****Instructions for Completing Mission Schedule/Brief (DA Form 5484-R)**

**C-1.** The briefer is responsible for ensuring that all key mission elements noted on the Mission Schedule/Brief have been briefed per paragraph 2-14, and documenting completion of the briefing on the Mission Schedule/Brief. Mission briefings may be in the form of an air mission commander's brief, a detailed operations order, or locally developed briefing formats as long as all the minimum mandatory items are covered. The mission brief may be accomplished by telephonic or other means provided all key elements are addressed and recorded by both parties to the brief.

Front Side

*a.* Item 1: Date.

*b.* Item 2: AC #—Enter aircraft tail number.

*c.* Item 3: PC—Enter the name of the pilot in command, seat designation, and if appropriate designation as air mission commander.

*d.* Item 4: PI—Enter the name of the pilot and seat designation.

*e.* Item 5: Crew members—Enter the names of nonrated crew members.

*f.* Item 6: FC—Enter authorized flight condition codes for the mission as described in paragraph 2-6 of this regulation.

*g.* Item 7: Mission—Enter the assigned mission number and/or title (that is, 3-02-01/air assault, maintenance test flight, contact APART, and so forth).

*h.* Item 8: ETD/ETE—Enter estimated time of departure and estimated time en route.

*i.* Item 9: PC—Pilot-in-command's initials. (Initials are the PC's acknowledgment that he has been briefed by the chain-of-command on key elements of the mission and briefed back key elements of the mission briefing).

*j.* Item 10: Auth—Initials of the commander or a qualified briefing officer, with designated risk management authority, constitute authorization for the flight. (Initials indicate that the chain of command has briefed all key mission elements, that risk management procedures have been completed and that identified risk has been reduced to the lowest acceptable level).

*k.* Item 11: RAV—Risk assessment value, calculated risk level for mission based on unit risk management program.

*l.* Item 12: MS—Mission status, to be completed by the PC at the end of the mission using the following codes:

(1) MC—Mission completed as briefed.

(2) NC—Mission not completed as briefed, see remarks on the back of the schedule.

(3) CX—Canceled.

*m.* Remarks—For local use as desired, continue on back if required.

Back Side:

The back side of the mission schedule will be used to document necessary mission status remarks. Example: 9 Nov 93, Msn 03-09-04, mission canceled by S-3, 1/20 Arty, initials M.S.

**C-2.** The Mission Schedule/Brief will be used to document the completion of required briefings. As a minimum it will be maintained on file for the time period specified in this regulation.

**C-3.** The Mission Schedule/Brief is provided for the commander's use. Unit developed forms may be used as long as all mandatory items are covered.

**C-4.** Information contained on the Mission Schedule/Brief does not relieve aircrew members from the requirement to know and adhere to applicable regulations, SOPs, and policies.

**C-5.** Supporting and supported unit commanders will coordinate and designate command relationships to execute mission briefings when aircrews are separated from their parent unit.

*Note.* Mandatory for all flights.

## Glossary

### Section I Abbreviations

#### A

acceptance test flight

#### AA

air to air

#### AAF

Army Air Field

#### AD

active duty, airworthiness directive

#### ADF

automatic direction finder

#### AFCS

Automatic Flight Control System

#### AFTP

Additional Flight Training Period

#### AGL

above ground level

#### AH

attack helicopter

#### AHRS

Attitude and Heading Reference System

#### ALSE

aviation life support equipment

#### ALSO

aviation life support officer

#### ALSS

aviation life support system

#### AMC

Army Materiel Command

#### AMOC

Aviation Maintenance Officer Course

#### AMCOM

Aviation and Missile Command

#### AN

Army/Navy

#### AO

aerial observer

#### APART

Annual Proficiency and Readiness Test

#### APU

Auxiliary Power Unit

#### AQTD

Airworthiness Qualification Test Directorate

#### AR

army regulation

#### ARCOM

Army Reserve Command

#### ARMS

Aviation Resource Management Survey

#### ARNG

Army National Guard

#### ARPERCEN

U.S. Army Reserve Personnel Center

#### ARRS

Aerospace Rescue and Recovery Service

#### ASA(FM)

Assistant Secretary of the Army (Financial Management)

#### ASAM

Aviation Safety Action Message

#### ASD(MRA&L)

Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics)

#### ASI

additional skill identifier

#### ASO

aviation safety officer

#### ATC

air traffic control

#### ATM

Aircrew Training Manual

#### ATTC

Aviation Technical Test Center

#### ATP

Aircrew Training Program

#### ATTRS

Army Training Requirements and Resources System

#### AVG ACFT

average number of aircraft

#### BA

budget activity

#### BNOC

basic non-commissioned officer course

#### C

combat mission

#### CAASS

Centralized Army Aviation Support System

#### CAR

Chief, Army Reserve

#### CB

chemical biological

#### CE

crew chief

#### CFR

Code of Federal Regulations

#### CG

commanding general

#### CH

transport helicopter

#### CNGB

Chief, National Guard Bureau

#### CONUS

Continental United States

#### CP

copilot

#### CSS

Centralized Scheduling Section

#### CTA

common table of allowances

#### D

day (for flight condition)

#### DA

Department of the Army

#### DAC

Department of the Army Civilian

#### DARR

Department of the Army Regional Representative

#### DAS

Director of the Army Staff

#### DATT

Defense Attaches

#### DCSLOG

Deputy Chief of Staff for Logistics

#### DCSOPS

Deputy Chief of Staff for Operations and Plans

#### DES

Directorate of Evaluation and Standardization

#### DH

decision height

#### DME

distance measuring equipment

#### DOD

Department of Defense

#### DS

day vision system

#### EML

environmental and morale leave

#### EIR

Equipment Improvement Report

**ESSS**  
External Stores Support System

**ETA**  
estimated time of arrival

**EUSA**  
Eighth U.S. Army

**EWS**  
Electronic Warfare System

**F**  
maintenance test flight

**FAA**  
Federal Aviation Administration

**FAAO**  
Field Artillery Aerial Observer

**FAC**  
flight activity category

**FAR**  
Federal Aviation Regulation

**FCC**  
Fire Control

**FDR**  
flight data recorder

**FE**  
flight engineer

**FHP**  
flying hour program

**FI**  
Nonrated Crew member Instructor

**FLIP**  
Flight Information Publication

**FORSCOM**  
Forces Command

**FRIES**  
First rope insertion/extraction system

**FSS**  
Flight Service Station

**FTG**  
flight training guide

**FW**  
fixed wing

**FY**  
fiscal year

**GOCOM**  
USAR general officer command

**GSA**  
Government Services Administration

**H**  
hood

**HARS**  
Heading and Attitude Reference System

**HEED**  
Helicopter emergency egress device

**HQDA**  
Headquarters, Department of the Army

**IATF**  
Individual Aircrew Training Folder

**ICAO**  
International Civil Aviation Organization

**IE**  
instrument flight examiner

**IFR**  
instrument flight rules

**IFRF**  
individual flight records folder

**IFRP**  
individual flight records program

**ILS**  
Instrument landing system

**IMA**  
individual mobilization asset

**IMC**  
instrument meteorological conditions

**INSCOM**  
Intelligence and Security Command

**IOC**  
initial operating capability

**IP**  
instructor pilot

**IRR**  
individual ready reserve

**JOSAC**  
Joint Operational Support Airlift Command

**LCCS**  
life cycle contractor support

**MAAG**  
Military Assistance and Advisory Group

**MAC**  
Military Airlift Command

**MACOM**  
major Army command

**MAST**  
military assistance to safety and traffic

**MACOM**  
major command

**MDA**  
minimum descent altitude

**MDS**  
Mission design series

**ME**  
maintenance test flight evaluator

**MEA**  
minimum en route altitude

**MM/MTPC**  
Maintenance Manager/Maintenance Test Pilot Course

**MO**  
flight surgeon or medical personnel

**MOA**  
Memorandum of agreement

**MOC**  
maintenance operation check

**MOCA**  
minimum obstruction clearance altitude

**MOPP**  
mission-oriented protective posture

**MOS**  
military occupational specialty

**MP**  
maintenance test pilot

**MPA**  
military pay and allowance

**MSL**  
mean sea level

**MTF**  
maintenance test flight

**MTOE**  
modified table of organizational equipment

**MTDS**  
mission, type, design, and series

**MWO**  
modification work order

**N**  
night

**NAS**  
Naval Air Station

**NAS**  
National Airspace System

**NAVAIR**  
Naval Air

**NBC**  
nuclear, biological, and chemical

**NCM**  
non-rated crew member

**NG**  
night goggles

<b>NGB</b> National Guard Bureau	<b>OSAD</b> Office of the Assistant Secretary of Defense	<b>SFTS</b> synthetic flight training systems
<b>NOE</b> nap-of-the-earth	<b>OSAC</b> Operational Support Airlift Command	<b>SI</b> nonrated crew member standardization instructor
<b>NOS</b> national oceanographic survey	<b>OPTEC</b> Operational Test and Evaluation Command	<b>SM</b> statute miles
<b>NOTAM</b> notices to airmen	<b>OSD</b> Office of the Secretary of Defense	<b>SOF</b> Safety of Flight
<b>NR</b> not required	<b>PI</b> pilot	<b>SOP</b> standing operating procedure
<b>NS</b> night systems	<b>PC</b> pilot in command	<b>SP</b> standardization instructor pilot
<b>NVD</b> night vision devices	<b>PIP</b> product improvement program	<b>SPIES</b> Special purpose insertional extraction system
<b>NVG</b> night vision goggles	<b>PMR</b> post mission report	<b>SUA</b> special use airspace
<b>NVS</b> night vision system	<b>POI</b> program of instruction	<b>SVFR</b> special visual flight rules
<b>OASD</b> Office of the Assistant Secretary of Defense	<b>POL</b> petroleum oils and lubricants	<b>T</b> training
<b>OBOGS</b> onboard oxygen generating system	<b>POM</b> program objective memorandum	<b>TACAN</b> tactical air navigation
<b>OCONUS</b> outside continental United States	<b>POMCUS</b> pre-positioned material configured to unit sets	<b>TAMMS</b> The Army Maintenance Management System
<b>OCSA</b> Office of Chief of Staff, U.S. Army	<b>PUJC</b> priority urgency justification category	<b>TB</b> technical bulletin
<b>ODCSLOG</b> Office of the Deputy Chief of Staff for Logistics	<b>QDR</b> quality deficiency report	<b>TDA</b> table of distribution and allowances
<b>ODCSOPS</b> Office of the Deputy Chief of Staff for Operations and Plans	<b>RC</b> Reserve Component	<b>TM</b> technical manual
<b>ODCSPER</b> Office of the Deputy Chief of Staff for Personnel	<b>RCM</b> rated crew member	<b>TO</b> technical order
<b>OFF</b> officer	<b>RL</b> readiness level	<b>TO&amp;E</b> table of organization and equipment
<b>OH</b> observation helicopter	<b>RSSK</b> ridged seat survival kit	<b>TR</b> terrain
<b>OHR</b> Operational Hazard Report	<b>RVR</b> runway visual range	<b>TRADOC</b> U.S. Army Training and Doctrine Command
<b>OMB</b> Office of Management and Budget	<b>RW</b> rotary wing	<b>UH</b> utility helicopter
<b>OPTEC</b> Operational Test Command	<b>S</b> service missions	<b>USAALS</b> U.S. Army Aviation Logistics School
<b>OR</b> operational ready	<b>SB</b> supply bulletin	<b>USAASD</b> U.S. Army Aeronautical Services Detachment
<b>OSA</b> operational support airlift	<b>SAM</b> Special Air Mission	<b>USAASD-E</b> U.S. Army Aeronautical Services Detachment Europe

**USAASA**  
U.S. Army Aeronautical Services Agency

**USAAVNC**  
U.S. Army Aviation Center

**USACEAC**  
U.S. Army Cost and Economic Analysis Center

**USAF**  
United States Air Force

**USAR**  
U.S. Army Reserve

**USARC**  
U.S. Army Reserve Command

**USARPAC**  
U.S. Army Pacific

**USARSO**  
U.S. Army South

**USASC**  
U.S. Army Safety Center

**USAASA**  
U.S. Army Aeronautical Services Agency

**USASOC**  
U.S. Army Special Operations Command

**USC**  
united states code

**USMC**  
United States Marine Corps

**USN**  
United States Navy

**UT**  
unit trainer

**VFR**  
visual flight rules

**VMC**  
visual meteorological condition

**VOR**  
very high frequency omni range

**VSSE**  
velocity of safe single engine

**W**  
weather

**WAC**  
world aeronautical chart

**WO**  
warrant officer

**X**  
experimental test flight

**XP**  
experimental test pilot

## **Section II Terms**

**Acceptance flight**  
A flight made to accept a contractor-produced aircraft, or one on which a contractor or Army depot has performed maintenance or contract modification before return to the operational inventory. It can also be a flight made by the receiving unit upon transfer of aircraft between components and/or units. Active Duty Guard/Reserve (AGR) Guard members and Reservists on full-time active duty for periods of 180 days or more to provide full-time support to the Reserve Components.

**Aerobatic flight**  
Intentional maneuvers involving an abrupt change in an aircraft's altitude, and abnormal attitude, or abnormal acceleration not needed for normal flight. This does not include a maneuver that conforms to the aircraft flight manual such as a "break" or a tactical or training maneuver when part of an approved training exercise.

**Aircrew training manual (ATM)**  
A publication that contains Army training requirements for Army flight crew members and programs for qualification, refresher, mission, and continuation training in support of the aircrew training program.

**Aircrew training program (ATP)**  
Army aviation aircrew standardized training and evaluation program.

**Airplane**  
An engine-driven fixed-wing aircraft heavier than air that is supported in flight by the dynamic reaction of the air against its wings.

**Air traffic incident report**  
Report on incidents that adversely affect the FAA air traffic service facilities in providing safe, orderly, and expeditious movement of air traffic. Usually prepared by FAA on FAA Form 8020-11.

**Alleged violations**  
Those infractions of applicable FAA, (ICAO), and host country flight regulations that create an unsafe condition or result in an incident or accident.

**Armed Forces**  
The Army, Navy, Air Force, Marine Corps, and Coast Guard, including their regular and Reserve Components and members serving without component status.

**Army aviation disaster, search, and rescue unit**  
A temporarily organized unit employed during an emergency. The unit equips, supplies,

safeguards, maintains, and operates Army aircraft during a disaster, an air search, or rescue.

**Army aviation standardization**  
The use of uniform tested procedures and techniques to attain a high level of readiness and professionalism in the operation and employment of Army aircraft. This is achieved through standardized publications and training literature, a disciplined instructor pilot force, tests, flight checks, and command supervision. Standardization includes aviator cockpit, performance, aircrew teamwork, tactics, maintenance, and safety.

**Army aviator**  
An aeronautical designation awarded to members of the U.S. Army by the Secretary of the Army or designated officers.

**Area standardization committee**  
A committee established within a nondefined geographical area composed of units too small to effectively set up their own standardization committee. The committee may be formed from various commands with aviation assets.

**Aviation officer**  
An Army or DA civilian aviator who commands an aviation unit or is a member of a commander's staff and advises or supervises Army aviation functions.

**Category (of aircraft)**  
Aircraft designated as either airplane or helicopter synonymous with type.

**Category II operations**  
With respect to the operation of aircraft, means a straight-in ILS approach to the runway of an airport under a Category II ILS instrument approach procedure issued by the administrator or other appropriate authority.

**Civil aircraft**  
Aircraft other than public aircraft.

**Code of Federal Regulations**  
14 CFR 91 contains Federal Air Regulations Part 91.

**Command/staff aviation officer**  
A special staff aviator designated by the commander to provide advice or manage aviation assets, aviation standardization, and aviation safety.

**Crewmember**  
The term includes all aviators (rated crew members), nonrated crew members, and others who perform aircrew duties as listed in paragraph 2-6.

**Cross-country flight**  
A flight extending beyond the local flying area or within the local flying area which is planned to terminate at a place other than the place of origin.

**DA civilian pilot (DAC aviator)**

A civil service employee who holds appropriate qualifications and who must comply with this regulation and other DA aviation-related regulations.

**Flight crew station**

A station in aircraft at which flight crew member occupies to perform their flight duty; for example, pilot stations specified in operator's manuals.

**Flight Engineer**

A flight engineer is responsible for maintaining his assigned aircraft and performing non-rated crew duties. He is the supervisor and primary trainer for the crewchief and mechanics assigned to the aircraft. The commander selects NCM's to perform FE duties based upon proficiency, experience, and rank.

**Flight surgeon**

Medical officer who has graduated from an approved military course in aviation medicine. References to flight surgeons include aeromedical physician's assistant.

**Helicopter**

A rotorcraft that, for its horizontal motion, depends principally on its engine-driven rotors.

**Installation**

For Army Aviation Standardization Program purposes, the term includes continental United States (CONUS) Active Component posts, camps, or stations; Army National Guard (ARNG) States; Army Reserve Commands (ARCOMs); overseas corps, divisions, independent regiments, groups, and brigades. For other than standardization purposes, includes Reserve Component facilities.

**Instructor Pilot (IP)**

An aviator who conducts training and evaluation of pilots and other crew members in designated aircraft and promotes safety among aviators. Training and evaluation include aircraft operation, qualification, unit employment, visual and instrument flight, and crew performance.

**Instrument examiner (IE)**

An aviator qualified to give instrument flight examinations and conduct instrument flight training.

**Large aircraft**

Aircraft of more than 12,500 pounds, maximum certificated takeoff weight.

**Maintenance operational check (MOC)**

Systems check made on the ground through engine runup and taxiing. Checks made using auxiliary power or testing equipment to simulate, insofar as possible, actual conditions under which the system is to operate. These

checks are made to ensure that aircraft systems or components disturbed during an inspection or maintenance have been repaired or adjusted satisfactorily.

**National Airspace System (NAS)**

All of the airspace above the surface of the earth over the United States and its possessions.

**Non-rated crew member**

Crewmembers who are not rated aviators and are placed on orders by the commander as authorized to perform aircrew duties IAW AR 600-106. Non-rated non-crew members become non-rated crew members when they are selected by the commander and integrated into the Aircrew Training Program.

**Nonstandard aircraft**

Army aircraft no longer classified Standard A or B or aircraft obtained from other DOD activities or commercial sources.

**Operational flying**

Flying performed by rated personnel primarily for mission support or training, while serving in assignments in which basic flying skills normally are kept current while performing assigned duties. All flying by rated members of the RC not on extended active duty is operational flying.

**OPTEMPO**

Hours flown per crew per month in MTOE rotary wing aircraft assigned in FORSCOM, USAREUR, USARPAC, EUSA, USARSO, ARNG, and USAR.

**Parachute**

A device used or intended to be used to retard the fall of a body or object through the air.

**Passenger**

A passenger is any occupant on the aircraft not performing a crew duty and logging flying time in accordance with paragraph 2-6. Passengers on Army aircraft must be authorized in accordance with chapter 3. Passenger names should not be entered on the DA Form 2408-12.

**Person**

An individual, firm, partnership, corporation, company, association, joint-stock association, or governmental entity. It includes a trustee, receiver, assignee, or similar representative of any of them.

**Public aircraft**

Aircraft used only in the service of a government of a political subdivision. It does not include any government-owned aircraft engaged in carrying persons or property for commercial purposes.

**Qualified for aviation service**

A volunteer aviation status requisite to entitlement for operational flying.

**Rated Crew member**

Aviators described in this regulation and AR 600-105.

**Standardization instructor pilot (SP)**

A qualified instructor pilot designated by the commander, in writing, to perform standardization duties.

**Synthetic Flight Training Systems**

A group of high-fidelity instrument and visual flight simulators capable of providing basic, advanced, and tactical training in either manual or automated modes.

**Tactical environment**

a. Actual - an active theater or area of combat operations.

b. Simulated - an operational area established for training and in which combat operations are simulated.

**Training mission**

Missions flown for flight qualification or refresher training. ATP requirements, and authorized training exercises.

**Unit Trainer**

An aviator designated to instruct in areas of special training to assist in unit training programs and achieve established training goals.

**Weather forecaster**

Any person approved by the USAF or Navy Air Weather Services or by the National Weather Service to forecast aviation weather for flight planning.

**Section III****Special Abbreviations and Terms****STABO**

Helicopter extraction system (derived from the first letter of the surnames of the five individuals who invented the helicopter extraction system)

## **Index**

This index is organized alphabetically by topic. The topics are identified by paragraph number.

Additional flight training periods (AFTP)  
Aeromedical training 4-14  
Air mission commander 4-22  
Aircraft lighting requirements 2-12  
Aircraft weight and balance file 7-4  
Aircraft weighing 7-7  
Aircraft Safety Equipment 8-6  
Aircraft weight and balance classifications 7-3  
Aircraft qualification / refresher training 4-6  
Aircrew Training Program 4-5  
Aircrew and maintenance checklists 2-5  
Aircrew Training Program (ATP) 4-1  
Aircrew information reading files 4-4  
ALSE Training for Aircrews 8-15  
ALSE Maintenance Personnel 8-13  
ALSE Storage and Work Areas 8-18  
ALSE Inspection, Maintenance, and Repair 8-17  
Annual proficiency and readiness test 4-7  
Arrival procedures 5-5  
ASAM Responsibilities 6-10  
ASE / Electronic Warfare (EW) training 4-17  
Authorization for ALSE 8-4  
Aviation standardization proponent 4-39  
Aviation standardization program 4-35  
Aviation Life Support Equipment (ALSE) 8-3  
Aviators restricted to limited cockpit duty 2-4  
  
Briefing officers 2-14  
  
Civilian flight time for RC aviators 4-12  
Committees 4-37  
Computation of flying time 2-7  
Copilot (CP) 4-24  
Crew endurance 3-17  
Crewmembers prohibited from performing aircrew duty 2-3  
Cross-leveling FHP Hours 1 0-11  
Currency 4-18  
  
DA Form 2696-R (Operational Hazard Report) 3-18  
Departure procedures 5-3  
Developing the Execution Year FHP 1 0-8  
Development of the POM FHP 1 0-6  
Development of the Budget FHPs 1 0-7  
Deviations 1-6  
  
Ejection seat training 4-15  
Emergency procedures training 4-8  
Enroute procedures 5-4  
Exception to provisions of SOF message 6-6  
Exceptions to provisions of ASAMs 6-14  
Experimental test pilot (XP) 4-31  
Explanation of abbreviations and terms 1-3  
  
Failure to meet ATP requirements. 4-10  
FHP Management Cycle 10-4  
FHP Concept of Management 10-3  
FHP Quarterly Projections Report 10-9  
FHP Management Policy 10-5

Flight Data Recorders (FDR) 8-5  
Flight crews 4-20  
Flight violations 2-13  
  
Hands-on performance test 4-9  
  
Individual flight records 2-8  
Installation and area standardization committees 4-38  
Instructor Pilot (IP) 4-26  
Instrument Examiner (IE) 4-27  
Internal Control Review Checklist 1-5  
Issuance of ASAMs 6-12  
  
Local flying rules 2-10  
Logging flying time 2-6  
  
MACOM, USARC and Army aviation  
MACOM FHP Diskettes 10-12  
Maintenance Operational Check (MOC) 3-20  
Maintenance test pilot Evaluator (ME) 4-30  
Maintenance Test Flights (MTF) 3-19  
Maintenance test pilot (MP) 4-29  
Mishap investigations, and release of information 3-15  
  
Noise abatement 2-15  
Nonrated crewmember Instructor (FI). 4-33  
Nonrated crewmember. 4-32  
Nonrated crewmember Standardization Instructor(SI) 4-34  
Nonstandard aircraft qualification training 9-7  
Nonstandard aircraft training and standardization 9-6  
Nonstandard aircraft qualification requirements for IPs 9-9  
Nonstandard aircraft flight evaluations 9-8  
Nonstandard aircraft waiver authority 9-4  
Nonstandard aircraft official publications 9-5  
Nonstandard aircraft logistical support 9-3  
  
Operational Support Airlift (OSA) mission 3-5  
Operational missions 3-3  
OSA Justification 3-7  
OSA Flight procedures 3-8  
OSA Management responsibilities 3-6  
OSA Data collection and use 3-9  
Oxygen System 8-7  
  
Parachute requirements 8-8  
Passenger policy 3-12  
Personnel authorized to run up Army aircraft 2-2  
Personnel authorized to fly Army aircraft 2-1  
Pilot (PI) 4-23  
Pilot in Command (PC) 4-21  
Preflight 5-2  
Prohibited missions 3-11  
Protective Clothing and Equipment 8-9  
Protective Masks 8-10  
Publications 4-3  
Purpose of performance records 3-22  
  
Release of grounded aircraft 6-8  
Removal, addition, or relocation of aircraft equipment 7-5  
Reporting the Execution Year FHP 10-10

Requests for performance records 3-21  
Responsibilities 1-4  
Reviewing weight and balance file 7-6  
Risk management 3-16  
  
Safety functions 3-14  
Seats, Seat Belts and Restraints 8-11  
Similar aircraft 4-19  
SOF responsibilities 6-2  
SOF messages 6-4  
Special missions 3-10  
Special use airspace (SUA) 2-11  
Standardization Instructor Pilot (SP) 4-28  
Survival Equipment 8-12  
Synthetic flight training system (SFTS) requirements 4-11  
  
Training of ALSE Maintenance Personnel 8-14  
Type of SOF messages 6-3  
Types of Aviation Safety Action Messages 6-11  
  
U.S. Army Aviation Commander's Conference 4-36  
Unit Trainer (UT) 4-25  
Use of airports, heliports, and other landing areas. 2-9  
  
Waivers and delegation of authority 1-7  
Waivers to requirements 4-2

**RESERVED**

<b>MANAGEMENT CONTROL EVALUATION CERTIFICATION STATEMENT</b>  For use of this form, see AR 11-2; the proponent agency is ASA(FM).		1. REGULATION NUMBER
		2. DATE OF REGULATION
3. ASSESSABLE UNIT		
4. FUNCTION		
5. METHOD OF EVALUATION <i>(Check one)</i>		
a. CHECKLIST		b. ALTERNATIVE METHOD <i>(Indicate method)</i>
APPENDIX <i>(Enter appropriate letter)</i>		
6. EVALUATION CONDUCTED BY		
a. NAME <i>(Last, First, MI)</i>		b. DATE OF EVALUATION
7. REMARKS <i>(Continue on reverse or use additional sheets of plain paper)</i>		
8. CERTIFICATION		
I certify that the key management controls in this function have been evaluated in accordance with provisions of AR 11-2, Management Control . I also certify that corrective action has been initiated to resolve any deficiencies detected. These deficiencies and corrective actions <i>(if any)</i> are described above or in attached documentation. This certification statement and any supporting documentation will be retained on file subject to audit/inspection until superseded by a subsequent management control evaluation.		
a. ACCESSABLE UNIT MANAGER		
(1) TYPED NAME AND TITLE		b. DATE CERTIFIED
(2) SIGNATURE		







**UNCLASSIFIED**

**PIN 004473-000**

# USAPA

ELECTRONIC PUBLISHING SYSTEM  
TEXT FORMATTER ... Version 2.45

PIN: 004473-000

DATE: 05-04-98

TIME: 16:04:11

PAGES SET: 58

---

DATA FILE: ar95-1.fil

DOCUMENT: AR 95-1

DOC STATUS: REVISION